The OIL and GAS JOURNAL

PRODUCING REFINING MARKETING

VOL. 24. NO. 18. TULSA, OKLAHOMA, SEPTEMBER 24, 1925

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California Crude Price Cut Big Factor

Highest daily average estimated production this year, week ended May 30, 2,347,984 bbls. Lowest January 3, 1,911,730 bbls.

Underselling Mid-Continent and Eastern Products in East May Result in General Crude Price Reduction

By Andrew M. Rowley

Highest daily average estimated light oil production this year, week ended January 17, 1,525,220 bbls. Lowest July 18, 1,374,173 bbls.

California, which has been a most vital factor in the crude and refined oil situation in the Mid-Continent and eastern area of the United States this year, is prepared to wield as great or possibly greater influence on the general situation as a result of the new crude oil price schedule made effective on Tuesday of this week. Substantial reductions in prices were announced, ranging as high as 40 cents a barrel in one area, and while the prices of the higher gravity crudes were not reduced as much as those of low gravity, the reduction is believed to be sufficient to permit California crude and refined oils to be shipped around to the Atlantic Coast markets at a price slightly below what Mid-Continent operators can lay down their products in those big consuming centers.

If the spread between prices of Mid-Continent and Eastern oils and those sent around to the East from California is large enough, it is believed another general crude oil price reduction in the fields outside of California is inevitable.

The production of light gravity crude has been showing substantial increases, the gain last week averaging more than 15,000 barrels a day. While a number of the larger companies in California are shutting in production in several of the fields, this production generally is of low gravity crude, and it is the higher gravity of California oil from which a big gasoline yield is obtained which is such a menace to the entire crude and refined oil structure of the country. California crude differs from that of the Mid-Continent area in that high yields of gasoline are obtained from crude of comparatively low gravity.

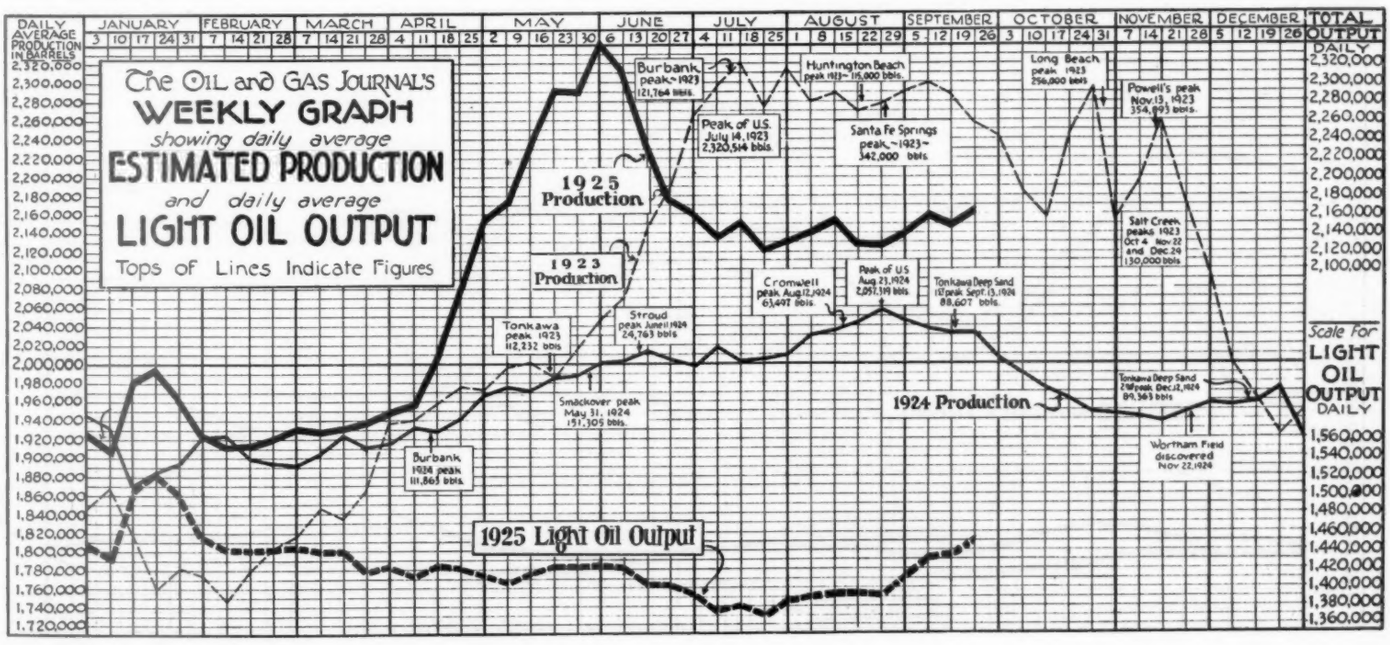
Oklahoma is fast approaching the 500,000-barrel-a-day mark predicted for it several months ago, and no substantial decreases in production should be expected outside of the California area where, as stated above, some companies are shutting in production in certain fields. Crude oil stocks will continue to increase at the present rate of production and this, with the reduction in prices in California, will further weaken the crude price situation in other areas.

PRODUCTION IN THE UNITED STATES

Estimated daily average production of light and heavy gravity crude oil in the United States for the week ended September 19, and a comparison with the previous week follows:

	Sept. 19		Sept. 12	
	Light	Heavy	Light	Heavy
Oklahoma—				
Tonkawa	56,595		55,335	
Burbank	52,630		53,865	
Other Osage Fields	34,755		33,510	
Cushing and Shamrock	22 655		22 635	
Bristow and Eastern Bristow	31,090		31,065	
Cromwell	26,870		28,670	
Papoose	14,560		14 705	
Garber	40,410		36,245	
Blackwell-Braman	23,980		22,495	
Davenport	15,760		13,440	
Northern Miscellaneous	113,455		106,465	
Southern Fields	61,125		61,050	
Total Oklahoma	493,885		479,480	
North Louisiana	47,825		48,632	
Arkansas—				
El Dorado and Calion	8,805		8,800	
Smackover Light	25,210		25,475	
Smackover Heavy		181,590		180,705
Stephens and Nevada	3,212		3,145	
Total Arkansas	37,227	181,590	37,420	180,705
North Central Texas	166,775		169,145	
Powell	42,300		43,000	
Mexia, Currie, Richland, etc.	23,310		23,060	
Wortham	22,200		23,500	
Kansas	111,730		111,765	
Total Mid-Continent Area	945,252	181,590	936,002	180,705
Gulf Coast		101,335		102,145
Southwest Texas		45,665		45,440
Eastern	108,125		108,050	
Rocky Mountain Area	112,925		113,975	
California—				
Santa Fe Springs	53,500		53,500	
Long Beach	103,500		103,000	
Huntington Beach	43,500		44,000	
Torrance	3,000	32,000		34,500
Dominguez	29,500		29,500	
Rosecrans	26,500		25,500	
Inglewood	10,000	86,000	9,000	91,000
Remainder of State	18,000	258,000	16,000	260,000
Total California	287,500	376,000	280,500	385,500
Total United States	1,453,802	704,590	1,438,527	713,790
Grand Total		2,158,392		2,152,317

Total Increase, 6,075 Bbls.; Light Oil Increase, 15,275 Bbls.


The OIL and GAS JOURNAL'S
WEEKLY GRAPH
showing daily average
ESTIMATED PRODUCTION
and daily average
LIGHT OIL OUTPUT
Tops of Lines Indicate Figures
1925 Production
1923 Production
1924 Production
1925 Light Oil Output
Burbank peak ~1923 121,764 bbls
Peak of U.S. July 14, 1923 2,320,514 bbls
Huntington Beach peak 1923 ~ 115,000 bbls.
Santa Fe Springs peak ~1923 ~ 342,000 bbls
Long Beach peak 1923 296,000 bbls
Powell's peak Nov 13, 1923 354,893 bbls.
Salt Creek peaks 1923 Oct 4 Nov 22 and Dec 24 130,000 bbls
Tonkawa peak 1923 112,232 bbls
Stroud peak June 11 1924 24,763 bbls
Smackover peak May 31, 1924 151,305 bbls
Burbank 1924 peak 111,865 bbls
Cromwell peak Aug 12, 1924 63,497 bbls
Peak of U.S. Aug 23, 1924 2,051,198 bbls
Tonkawa Deep Sand (1st peak Sept 13, 1924 88,607 bbls
Tonkawa Deep Sand 2nd peak Dec 12, 1924 89,363 bbls
Wortham Field discovered Nov 22, 1924
Scale For LIGHT OIL OUTPUT DAILY
TOTAL OUTPUT DAILY
DAILY AVERAGE PRODUCTION IN BARRELS
JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER

Oklahoma Motor Fuel Prices Advance

Gasoline Situation Grows Tighter. Kerosene Continues Scarce. Fuel Oil Trend Sluggish but Market Steady. Naturals in Demand

By Neil Williams

The continued increasing strength of U. S. Motor gasoline and all grades of naturals with accompanying advances of 1 cent a gallon featured the Oklahoma (Group 3) refined market the past week. The situation of all other products, although strong, was little changed from the past week.

In addition to gasolines, the only other advances were in kerosene, which continued scarce, the 42-44, water white grade being next to impossible to obtain at any price. Fuel oils, gas oils and distillates were inclined toward sluggishness but the influence of the anthracite strike was sufficient to maintain their strength.

The strong position of gasolines the past week was admitted by nearly all sellers as due to a wave of over-selling the previous week because a noticeable falling off in jobbers' orders was felt as soon as the market touched the 9½ cent figure early in the week.

However, the fact that some refiners, not only are sold up for the month but actually are over-sold, has forced them into the open market themselves and this buying the past week has virtually cleaned up all available gasoline in Oklahoma and resulted in a steady and rapid advance in all quotations.

Little Gasoline Available

Although there were some bearish elements in the refined market the past week, the general feeling among buyers and sellers alike was that the present strength can be maintained at least through the remainder of the month and in all probability until the middle or last of October. The very fact that little gasoline now is available for immediate shipment and that refiners are hard pushed to keep up with orders already contracted lends color to this belief as it is not probable that any gasoline will be placed in storage at this time. On the other hand, at the close of the month when over-sold refiners must complete their contracts there may be a still greater attempt to buy gasoline on the open market.

This present tight gasoline situation was displayed the past week in the fact that it was very difficult to get any gasoline for immediate shipment at any price. Many buyers who tried to obtain car numbers were unable to get them and had to be content with promises of fairly prompt shipment which meant that refiners would bill out the cars as soon as possible.

Some market observers were alarmed during the week with the belief that 10 cent gasoline would encourage many refiners to increase their crude runs to stills in order to relieve the present acute tightness of gasoline. Although no definite information and figures have been obtained, some refiners are known to have done this very thing, especially at plants in North Central Texas.

Reductions in tankwagon prices in some parts of the country and advances in others the past week showed that gasoline markets are not entirely settled yet. However, the fact that some advances were made caused Oklahoma refiners to feel tank wagon prices now are at the bottom and that the tendency from now on will be upward.

Gasoline and Naphtha

Although the 58-60-437 (U. S. Motor) gasoline was the feature of the refined market, all other grades of gasoline and naphtha increased in strength and prices during the week. The advance in other products, however, was not nearly so great as in the U. S. Motor market. Export buying, which has proved of material benefit to higher gravities of gasoline the past few weeks, was noticeably absent the past few days, but despite this these products were strong. This strength was not only out of sympathy with the U. S. motor grade, but also due to the fact that the recent export buying virtually cleaned up all available high-gravity gasolines. A number of domestic buyers attempted to get scattering cars of both 60-62, 400, and 64-66, 375, but found difficulty in meeting their needs and Tuesday were forced to pay as high as 11 to 11¼ cents for the former and 12 cents for the latter gasoline. There was very little 68-70, 350 gasoline on the market as usual, but the market price ranged from 13 to 13¼ cents.

With colder weather coming on the price differential between the 56-58, 450 and the U. S. Motor gasoline was greater the past week with popularity of the former declining. The former grade could be obtained for 9½ to 9¾ cents Tuesday, but the latter gasoline was difficult to get for immediate shipment at 10 cents and some buyers were forced to pay 10¼ cents. Quotations for shipment of U. S. motor gasoline over October ranged from 10½ cents up. Because of the inactivity of blenders there has been comparatively little movement of naphthas and the present market of 9 to 9½ cents on that product can be attributed alone to the strength of gasolines.

Natural Gasoline and Blends

Natural gasolines shared with the U. S. Motor gasoline the limelight in the Oklahoma refined market with advances of more than 1 cent in prices the past week. Natural gasolines were almost unobtainable at any price Tuesday, but a few purchases were made at 13¼ to 13½ cents, with the tendency toward the higher figure. Natural gasoline sellers report they are besieged with calls for their products, but are able to supply only a limited amount of the demand. Although the demand for naturals usually is heavy at this time of year, the calls this year are reported greater than ever before.

Blended motor natural gasolines are becoming less and less an item in the Oklahoma refined market. Manufacturers of the product can be counted on the fingers of one hand and these are making only limited amounts. As there is little demand for the products, the present rise in prices is due chiefly to the strength of other gasolines.

Kerosene and Distillates

Kerosene continued scarce with rising prices the past week and Tuesday it was difficult to get the 41-43 water white

(Continued on Page 132)

REFINED MARKET BAROMETER

Despite additional tank wagon price reductions in some areas, a generally better tone prevailed throughout most refined markets of the country the past week. Although the gasoline situation on the Atlantic Seaboard still was weak, the strength of the Mid-Continent and Chicago markets showed signs of spreading. A tank wagon advance in the Standard Oil Co. of Louisiana territory gave rise to the opinion that prices have reached bottom. Kerosene generally continued strong with rising prices, aided by a general tank wagon advance in Atlantic Coast states. Fuel oil and gas oil were firm and steady in all sections, but slackening of demand caused weak undertone in lubricants. Wax was unchanged. Natural gasolines were scarce with rising prices.

Mid-Continent—Continued strengthening of gasoline with rapidly rising prices featured most refined markets the past week. Kerosene was scarce, particularly in Oklahoma and Texas. Fuel oil and gas continued firm with steady prices despite a tendency of sluggishness. Natural gasoline prices soared. Lubricants had soft undertone but prices unchanged.

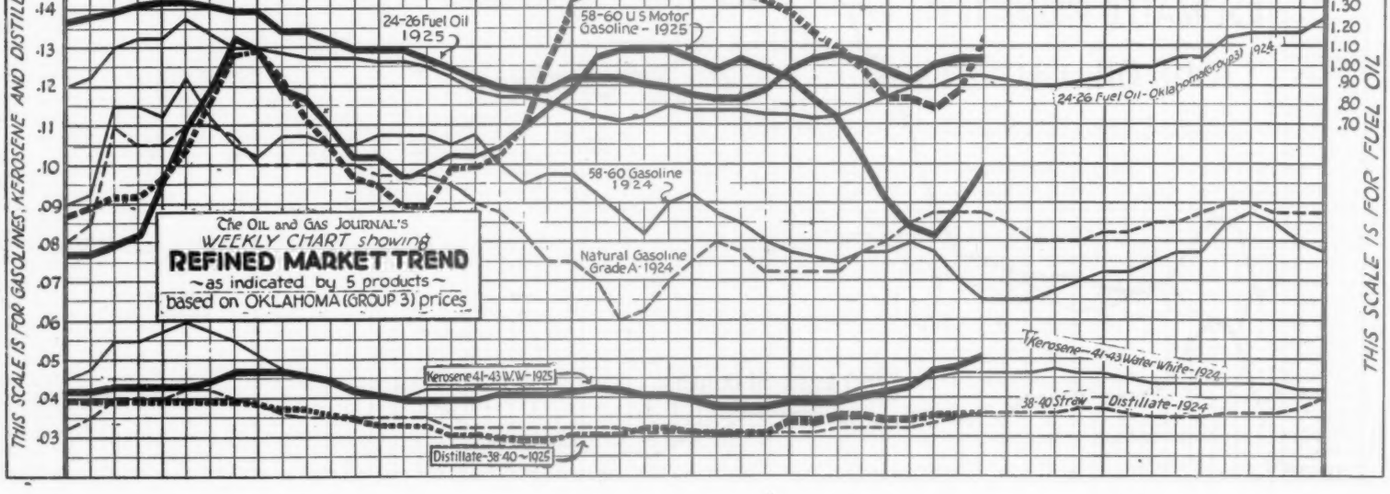
Atlantic Seaboard—Refined markets still unsettled with additional tank wagon reductions in gasoline. Kerosene unchanged with no decided improvement in statistical situation but helped by tank wagon advance of quarter cent in Standard Oil Co. of New Jersey territory. Gas oil and fuel oil fairly firm. Lubricants inactive. Petroleum firmer. Export situation unchanged.

Pennsylvania—Improvement shown in Pennsylvania refined market situation with better tone prevailing. Gasoline and cylinder stocks active.

Chicago—Refined market continues strong but gasoline prices believed at high mark. Kerosene still in active demand. Gas oil and fuel oil dragging. Lubricants unchanged.

Gulf Coast—Lubricants continue weaker with prices uncertain. Other refined products little changed.

California—General reduction in California crude oil causes further weakening in refined markets. Gasoline prices uncertain with tank wagon scheduled shaky. Natural gasolines fairly firm. Lubricants moving in good volume. Fuel oil and kerosene sluggish.


CENTS PER GAL
DOLLARS PER BBL.
JAN. FEB. MARCH APRIL MAY JUNE JULY AUG. SEPT OCT. NOV. DEC.
THIS SCALE IS FOR GASOLINES, KEROSENE AND DISTILLATE
THIS SCALE IS FOR FUEL OIL
Natural Gasoline Grade A - 1925
24-26 Fuel Oil 1925
58-60 U.S. Motor Gasoline - 1925
24-26 Fuel Oil - Oklahoma - 1924
58-60 Gasoline 1924
Natural Gasoline Grade A 1924
Kerosene 41-43 W.W. - 1925
Kerosene - 41-43 Water White - 1924
38-40 Straw Distillate - 1924
Distillate - 38-40 - 1925
The Oil and Gas Journal's
WEEKLY CHART showing
REFINED MARKET TREND
- as indicated by 5 products -
based on OKLAHOMA (GROUP 3) prices

Death of A. C. Bedford Unexpected

Chairman of the Board of Directors of Standard Oil Company of New Jersey Expires Suddenly From Heart Disease. Notable Career

NEW YORK, Sept. 21.—The death of A. C. Bedford, chairman of the board of directors of the Standard Oil Co., of New Jersey, at his home in East Norwich, Long Island, this morning from heart disease, was sudden and entirely unexpected. He returned from Europe late in August, having suffered an attack on shipboard, but had apparently recovered and since had been at his desk working with oldtime vigor.

Recently he spoke before graduates of the company's training class and prefaced his remarks by saying he had reached the conclusion that industry is the fundamental basis of civilization. Neither love, learning, religion nor patriotism, qualities of fundamental nature, could be put into effective execution without work, he said. Mr. Bedford, who himself exemplified these qualities, may be said to have practiced what he preached as regards personal industry. He gave the best that was in him and attained leadership and esteem in a wide field of enterprise and activity.

Mr. Bedford would have been 61 years old on November 5. He was in his office almost every day last week. His last visit abroad was primarily in connection with the meeting of the International Chamber of Commerce, held at Brussels. Prominent as one of the organizers of the International Chamber in Paris in 1920, he was intensely interested in its development.

The outstanding achievement of his earlier connection with the Standard Oil organization resulted from his being placed in charge of the natural gas department of the company. The value of this department while he was in charge increased from $12,000,000 to $125,000,000. When the Government began its dissolution suit, Mr. Bedford was prominent in the company's defense and later was made vice president. Upon the death of John D. Archbold in December, 1916, he was chosen to succeed him as president at Archbold's expressed wish.

Crowning Work in War

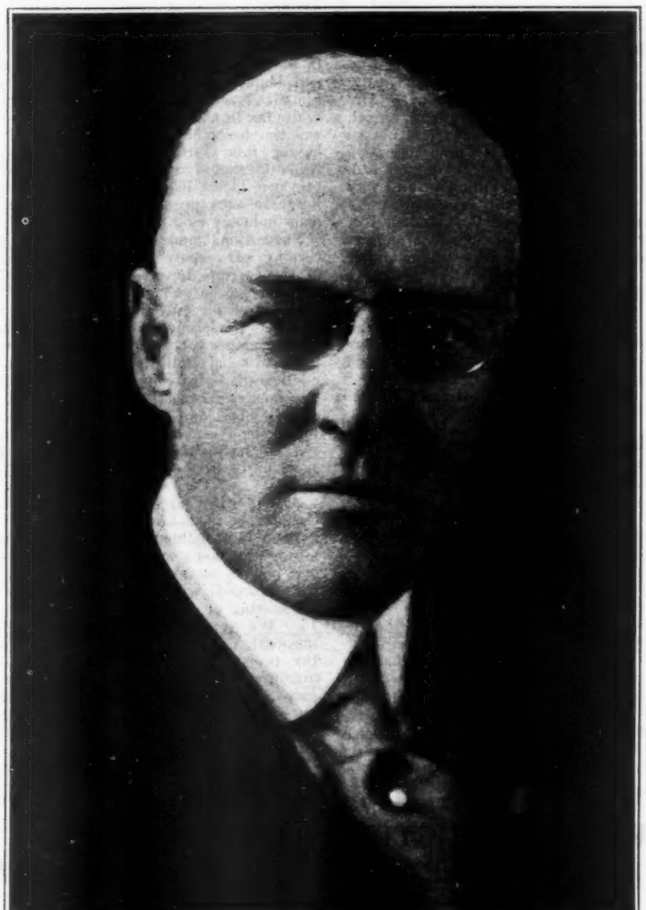
When the United States entered the World War Mr. Bedford began on what was to be the crowning work of his career—the organization of the petroleum industry in war endeavor. Having the one thought of supplying the greatly increased and vitally urgent needs, he accomplished the difficult task of uniting the industry and succeeded not only in directing the industry in the fulfillment of an envious war record but in building the foundation for a new era of understanding within the industry.

Laboring practically alone, Mr. Bedford could be seen in Washington in the early days after this country's entrance into the conflict developing his plan for the industry's war organization and early in 1917 he was made chairman of the Petroleum Committee of the Council of National Defense. This developed into the Petroleum War Service Committee which, with sub-committees, represented the organization of every branch and every geographical district of the industry, Mr. Bedford serving as chairman throughout. His handling of many vital questions, including such crises as the gasoline shortage in 1918, resulting in volutary gasless Sundays, stamped him as a leader among business statesmen.

Honored by Governments

Early in 1919 a dinner was tendered to Mr. Bedford at which he was given the red ribbon of an officer of the Legion of Honor. Representatives of the Allied nations and petroleum leaders paid tribute to Mr. Bedford's qualities. Later Mr. Bedford was also decorated by the Italian Government. His conception of a new day in the petroleum industry crystallized after the war in organization of the American Petroleum Institute, which began functioning practically as a continuation of the Petroleum War Service Committee organization. Believing that the best results would attend its development if he kept in the background, he gave the institute his wholehearted support, discouraging any personal honors. But it may be truly said that he was the father of the institute, and that he lived to see his vision as to what it could accomplish for the industry as a whole taking definite shape.

When the war was in progress and while Mr. Bedford was actively engaged in organizing the industry, he was made chairman of the board of the Standard Oil Co. of New Jersey. Since the war his interests have at all times transcended the scope of his business concerns. He paid constant and trained attention to matters of European politics and economics and was one of the first important men to indorse the Dawes plan.



A. C. BEDFORD (c) Underwood & Underwood

High Lights in Business Career

Alfred Cotton Bedford was born November 5, 1864, in Brooklyn, N. Y. He was of English and Welsh descent. His father, Alfred Bedford, was for many years the representative in Europe of the American Waltham Watch Co. Mr. Bedford received his early education at Adelphi Academy in Brooklyn, afterward pursuing his studies in England, Germany and Switzerland. He entered business life with the dry goods firm of E. S. Jaffray & Co. in New York, with whom he remained for nine months, and then commenced his notable career in the oil industry.

Mr. Bedford, at the age of 17 years, entered the employ of the Bergenport Chemical Co., a subsidiary of the Standard Oil Co., on April 9, 1882. He remained in the manufacturing department of the Standard Oil Co. until January 1907, but meanwhile he had become general manager of the Bergenport Chemical Co. and afterwards general representative of Charles Pratt & Co. and, following this, general manager of that firm. Charles Pratt & Co. had widespread interests and Mr. Bedford represented them in many and varied corporations, at one time being director and treasurer of the Long Island Railroad Co.; director and secretary of the Ohio River Railroad Co.; president of the Portland General Electric Co. of Portland, Oregon; president of the Pratt & Lambert Varnish Co.; president of the Self Winding Clock Co.; director in The Thrift, and in many other industrial, electric lighting and railroad companies, thereby acquiring a very general business training with large and valuable commercial experience.

In 1907 he was made a member of the board of directors of the Standard Oil Co., was elected its treasurer in 1910; vice president in 1911, the year the Standard Oil Co. was divided into many parts by decree of the Supreme Court of the United States, and its president in 1916. He was elected chairman of the board of directors in 1917 which position he held at the time of his death.

Mr. Bedford was one of the organizers of the Chamber of Commerce of the United States and was its vice president and chairman of the Executive Committee. He was vice president and chairman of the American Committee of the International Chamber of Commerce and vice president of the Chamber of Commerce of the State of New York.

In his private life Mr. Bedford was a member of and president of the board of trustees of Emmanuel Baptist Church, Brooklyn; a director of the Brooklyn Y. M. C. A. and member of the council of Pratt Institute, Brooklyn.

He was a member of the Metropolitan

(Continued on Page 144)

EDITORIAL

A. C. BEDFORD

A. C. Bedford was a distinguished representative of the best type of American big business. Under his direction the Standard Oil Company was coming to be recognized by his countrymen for what it had long been known abroad, the outstanding example of the efficiency and enterprise in business which the world honors us by terming American.

In this respect the Standard had suffered the fate of the prophet not without honor save in his own country. But Mr. Bedford's policies were changing that, and Americans today appreciate more fully than ever before the important part played by the great oil company in supplying the world with an essential product.

The first of the new generation of executives following the dissolution, Mr. Bedford assumed charge under the additional handicap of the war. In both problems he displayed a vision and a genius that may best be described as statesmanlike. The tribute paid to him by the late Lord Northcliffe fitly estimates the weight which his decisions threw into the world struggle at a critical moment, while his services as head of the United States Petroleum War Board evoked the famous declaration from the late Lord Curzon that the allies floated to victory on a sea of oil. The wonderfully successful unification and cooperation of the multitudinous factors in the petroleum and allied industries during the war was due in large measure to the qualities of leadership and personality in Mr. Bedford

The improved relationships within the industry since then have been likewise attributable in no small degree to the wisdom of Mr. Bedford. He was too big a man to lose himself in merely competitive controversies within the industry. His world view concentrated his activities on the main problem, the highest attainable efficiency in utilizing the petroleum resources to the best advantage of mankind.

In Europe, whence he had but recently returned from attending the International Chamber of Commerce, of which he was the American chairman, he was ranked among the foremost leaders of modern industry. At home he was so customarily engrossed in his labors that his public appearances were rare, and the bulk of his countrymen had no adequate conception of the position he occupied among the builders of present day America. Yet they, with the petroleum industry, have lost a leader who could ill be spared.

National Petroleum Association Meets

Annual Session of Eastern Refiners at Atlantic City Discusses Industrial Issues of the Day. Reports of Departments Considered

By L. M. Fanning

ATLANTIC CITY, N. J., Sept. 19—Reports reflecting the life and vigor of its various actively functioning departments, addresses bespeaking recognition of the major problems the industry is facing and good fellowship which is part and parcel of the industry's oldest petroleum association, marked the annual meeting of the National Petroleum Association held here September 16, 17 and 18.

A. S. T. M. pour test methods for lubricating oils came in for severe criticism in discussion on standards and tests at the second day's meeting, it being brought out that many cars of the Pennsylvania refiners were now on rejection on pour test alone. The particular method under fire was the proposed modification of A. S. T. M. pour test applying to oils which give erratic results under present methods as published in the 1925 report of Committee D-2 of the American Society for Testing Materials, the stated purpose of which is to secure uniformity in testing, regardless of any previous heat treatment or storage conditions, of the sample, and at the same time to obtain results which would be related to the actual condition the oil reaches in storage.

The general attitude of the members was that A. S. T. M. pour test methods were working hardship on Pennsylvania refiners, raising uncertainties that are making it impossible to market neutral oil and cylinder stocks with safety. It was pointed out that the tests had no relation to actual use. O. P. Keeney pointed out that they were empirical tests but that the Government is trying to establish the utility factor which, as regards lubricants, is revolutionary and will take years in the accomplishment. The members passed a resolution requesting the association's Department of Standards and Tests to devise a method to make cold tests give results comparable to commercial use and the practical handling of lubricating oils by collaborating with other agencies. It was also recommended that the Pennsylvania refiners be represented on Committee D-2.

The confusion in the use of temperature correction tables came in for discussion and a resolution was passed recommending the adoption of the A. S. T. M. abridged table for general use of all members with reservation of the right to use the full Bureau of Standards table under certain conditions. Mr. Keeney pointed out that the recent gasoline specifications issued by the Federal Specifications Board were unsatisfactory, begged the question and caused confusion. Definite recommendations have been made by the industry, he said, and a better situation is hoped for.

Importance of Research

Importance of research and science in petroleum refining was stressed. J. F. Oakleaf, chief research chemist, Vacuum Oil Co., in his address on "Application of Science to Petroleum Refining," traced the necessity for the practical refiner first to have a working knowledge of his raw material through the scientific phases as expressed by inspection laboratory investigation of impurities, devising improved methods of conditioning crudes, etc. He said the very nature of the oil business in which the gross value of material handled is greater than in most any other manufacturing line makes it possible, with scientific aid, to effect tremendous savings.

With proper foreknowledge of crude supply the practical refiner meets great scientific possibilities in the running of his crude to finished products, and Mr. Oakleaf pointed out how the refiner and scientific investigator are bringing about advancement of the art. In conclusion, he said: "Let me say that appeal in any investigation work is psychologically toward the new, and startling. Any worker, whether scientific or practical, would prefer to delve in matters not so old and hum-drum as most of those with which we have to earn our daily bread. However, without curtailing in any way the wonderful possibilities existing in a business like ours from the standpoint of scientific research in new and unexplored fields, there are still available many excellent opportunities for the practical refiner and the scientific investigator to combine their efforts on problems of an immediate and essential nature, the solutions of which are sure to return a maximum of satisfaction and profit."

Legislation and Litigation

Fayette B. Dow, Washington counsel, and Willis Crane, traffic attorney, rendered a comprehensive report on their work during the past year respecting industry legislation and litigation and traffic matters. Regarding the rate structure investigation of the I. C. C. and the application for increased rates by the western roads, Mr. Dow said:

"The Committee of the Board of Directors of the American Petroleum Institute which was authorized to determine what, if any, action should be taken by the Institute in connection with the rate structure investigation has requested that the Petroleum Rate Committee, which acted in reduced rates, 1922, be reconstituted; that the pertinent data used in that case be brought down to date; and that such further data be assembled as may seem desirable.

"Your Washington counsel was asked to act as chairman of the reconstituted petroleum rate structure investigation committee and to attend the hearings beginning in Chicago on September 8. It was the desire of the institute's directors having this matter in charge that the institute should not enter a formal appearance in the investigation unless some proposal were presented with the petroleum industry as a whole should oppose."

Suggestions made by Mr. Crane concerning car repair rules and practices of the carriers in presenting car repair bills have been submitted to the American Petroleum Institute for action before the American Railway Association. He recommends the making of the repair card in triplicate and immediately mailing the extra copy to the car owner. Car repairs arising through the fault of a carrier might and properly should be adjusted, he recommends, between the carriers, relieving the car owner of any responsibility in the situation.

Car Capacity

Among other subjects discussed by Mr. Crane were the following:

"The Consolidated Classification Committee proposed a minimum weight of 30,000 pounds on shipments in tank cars. This proposal was the subject of a public meeting at Atlantic City, N. J., July 14. We appeared in opposition to the proposal. Apparently the purpose of the proposed minimum weight was to discourage the building and use of tank cars of unusually small capacities. As an example, one of the members of the Consolidated Classification Committee stated that he had information that a certain shipper, not a member of the association, had planned to build and use tank cars of only 1,200 pounds capacity. As an outcome of the meeting we were asked to suggest some disposition of the matter which would afford the carriers the protection they desire and at the same time would not work a hardship on present owners of cars having capacities of less than 30,000 pounds. We have corresponded with the members, and as a result have suggested to the Consolidated Classification Committee the adoption of a minimum weight of 26,000 pounds, in lieu of the proposed minimum weight of 30,000 pounds, with an exception to the effect that the minimum weight shall not apply to cars of smaller capacities already in service. No definite action has yet been taken by the carriers.

"The carriers have proposed to cancel all commodity rates shown in C. F. A. L. Tariff 203-C between points where rates can be made by use of the equivalent table in its relationship to the fifth-class rates. This would result in numerous increases in rates and we think is otherwise very undesirable. The matter has been assigned for hearing before the Central Freight Association Committee September 30, 1925, at which time we will oppose the proposed increases vigorously."

Mr. Dow brought out that the Maple Flooring Manufacturing Association decision of the United States Supreme Court "sanctions the gathering of statistics and the discussion of those statistics at meetings, but it clearly forbids any agreement or attempt to reach any agreement or any concerted action with respect to prices or production or restraining competition."

Report of the Department of Traffic and Transportation, Frank B. Fretter, trustee in charge, outlined the progress that had been made in organizing traffic groups, and said:

"The importance of regular attendance of representatives of members at the various traffic group meetings, whether joint or local, can hardly be overemphasized. We conceive the Department of Traffic and Transportation to be a real opportunity for cooperative effort to the mutual gain of the members. The legal aspects of the traffic work are in competent hands, but only through the very closest cooperation can the work reach the highest degree of effectiveness."

A review of the work of the Department of Legislation and Litigation was made by Sheldon Clark, trustee in charge.

Information Bureau

B. B. Stroud, trustee in charge, Department of Manufacture, told of the visits that were being made to various refineries, and of regular group meetings. "The councillors are a unit in advising that the group meetings and refinery visits be continued and we are glad to advise that the Bayonne plant of the Tide Water Oil Co. will be visited some time in October of this year," he said. "With the resumption of the group meetings, (discontinued during the summer), the councillors plan to perfect an arrangement whereby the association will have available an information bureau where all inquiries, with reference to new developments, equipment, refinery practice, etc., may be directed. We hope to develop this bureau to the point where we will be justified in recommending the employment of a high class engineer to handle this work, and, finally, the establishment of a research laboratory."

The report of E. C. Gardner, trustee in charge, Department of Standards and Tests, submitted by R. M. Shanklin, reviewed the work of the various agencies on uniform methods and tests and em-

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GROSS PRODUCTION TAX INCREASE TO BE OPPOSED IN OKLAHOMA

A check-up on the 45,000 names filed by the Oklahoma State Taxpayers Association, of which Campbell Russell is secretary, in support of Initiative Petition No. 89 to raise the gross production tax on oil from 3 per cent to an undetermined rate which shall equal the average of ad valorem tax rates in the State, is, the Mid-Continent Oil & Gas Association reports, revealing many irregularities in the manner in which names were procured and also disclosing that there are numerous forgeries and insufficiencies or failures to meet the requirements of the Oklahoma statutes relating to initiative petitions.

Auditors and checkers report they have found over 5,000 illegal names and, if their contention is sustained, the petitions will be held insufficient, to be determined by the State Supreme Court, where a trial de novo is provided by the statutes.

Oil attorneys assert that, by reason of the ambiguity of the proposed law, and that the scheme contemplates a procedure which would result in levying a gross production tax based upon local ad valorem levies in non-oil producing districts such as cities and towns having no relation to the needs of the State funds to which the gross production tax proceeds are distributed, the new law may be held unconstitutional if adopted. Those who have responsibility for raising and disbursing the funds to keep the State Government going are very much alarmed as the gross production tax furnishes nearly all of the tax revenue with which the State Government is conducted. The present 3 per cent tax has been submitted to by the oil industry and has been easily collected. In fact, it is yielding so much revenue no one conversant with the situation desires to see the present system jeopardized.

The oil industry contends it would pay less taxes if it were returned wholly to the ad valorem tax system. In that event the constitutional limit of ad valorem taxes for State purposes would not be adequate to run the State Government, because the oil revenue would go to the oil-producing counties instead of the State.

The Mid-Continent Oil & Gas Association, which represents the majority of both the small and large producers of oil in the State, is making a study of the proposed measure and its governing body, the Executive Committee for Oklahoma, at a meeting September 15, issued the following statement:

Statement of Executive Committee

The title of the proposed measure is misleading in so far as it indicates a purpose to "equalize" the gross production tax with ad valorem tax rates on other kinds of property and seeks to create the impression that oil is not now paying its just share of taxation. It is to allege that the proposed increase in the oil and mineral tax would materially reduce taxes on other kinds of property.

It is illogical in that it provides that the gross production tax which goes mainly into the State Treasury shall be assessed at an arbitrary rate equal to the average of ad valorem rates assessed mainly by local boards for local purposes. There is no relation between the

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BEWARE OF TAX JUGGLERS

The present proposal to increase the gross production tax in Oklahoma gives the oil industry opportunity to get the public ear.

While Campbell Russell and his initiative petition are focusing popular attention on this subject, oil men should take advantage of it to tell the people of the State just what the oil industry means to Oklahoma.

The Mid-Continent Oil & Gas Association has undertaken this job. There is no public question about which the people are less informed than taxation. Their knowledge of it is usually limited to paying the bills.

But there is no detail of public business that would better repay their study than the right and wrong ways of levying taxes and the effects of taxation on the community as well as upon the individual taxpayer.

There is, for example, no more deeply rooted fallacy than the popular notion that taxes cannot be piled too high upon big business, including the oil industry which is generally included in that category, although it is made up of thousands of small producers who take most of the risks.

We had an example of the same way of thinking in the excessive Federal income taxes intended to "soak the rich," but which have been found having just the contrary effect. Excessive Federal taxation drove wealth into tax-exempt investments, actually depriving the Government of revenue it might have had and at the same time thereby withdrawing that money from investment in productive industry and business and to that extent obstructing the progress of the whole people.

Experience, however, seems to have taught the country and Congress a lesson and the next session will see a reduction of taxation that will permit investments being withdrawn from tax-exempt bonds and their use in constructive enterprises.

The urge to increase the gross production tax on oil in Oklahoma sprang from exactly the same mistaken impulse.

This gross production tax, paid by the industry on oil produced in Oklahoma, supplies the larger part of the State revenues. It has amounted to over $51,500,000 in the past nine years. In addition, oil men have been paying their full share of the ad valorem taxes on their other properties.

This gross production tax, moreover, has been paid on oil produced at a loss, as well as that produced at a profit. Not infrequently this tax has transformed production into a loss.

It is now proposed to increase this tax approximately 50 per cent with that much greater chance of turning production in more cases into a deficit.

The more oil money the State exacts in excessive taxes the less there will be to carry on the drilling and exploration of the Oklahoma fields on which the State depends for revenue.

Of the 60,000 wells in the State nearly two-thirds are averaging one barrel a day. Heavier taxes will hasten the abandonment of these old small wells and deprive the State of that much revenue and the prosperity their production would mean to Oklahoma.

Yet this is the industry upon which the State relies for the bulk of its operating revenues, an industry, it might be thought, the State would aid for its revenue producing capacity.

The appeal behind this campaign for increasing the tax on oil is characteristic of most of the popular thought on taxation. The petitions were promoted by the argument that if the tax on oil was increased the taxes on other property could be lowered.

Did any one ever hear of a case where such a promise ever resulted in lower taxes? Is it not the universal experience that no matter how taxes are increased in any direction they are not lowered in others?

Once in a long time pressure of popular indignation may force general reduction, as in the case of Congress, but these sectional schemes for raising somebody else's taxes and lowering yours never do work out.

The oil industry has just gone through several years of depression. It is faced with increasing costs in deeper drilling, the constant hazards of dry holes and the wide fluctuations in prices that add to the uncertainty of the business.

These facts should be familiar to Oklahomans from their personal association with oil men and proximity to the fields. But several thousands have been found unthinking enough to sign this petition to further handicap the industry which gives the State its chief revenue.

The method by which it is sought to increase this taxation on oil is as devious as the arguments in support of it. It is asserted that the oil industry is not paying its proportionate share.

The fact that the gross production tax is stated as 3 per cent and the ad valorem system is followed for other taxation is used to confuse the public.

Now the 3 per cent tax is equivalent to a 30 mills ad valorem tax. The ad valorem tax on other property for several years has ranged from 28 to 37 mills on a valuation of 40 to 60 per cent. And this has included the high levies in cities and towns where no oil is produced. Excluding them the average ad valorem tax rate has always been less than the 30 mills on 100 per cent valuation the oil industry pays in gross production tax.

If the oil producer was assessed under the ad valorem system at the same rate as all other property outside the cities and towns where no oil is produced he would pay less than he is now paying.

But this would not suit the promotors of this proposal to "soak the oil industry." They wish to add the high levies in cities and towns to raise the average for the State and thus impose approximately a 50 per cent increase on oil.

That is what it would amount to. The gross production tax has increased through the development of the oil resources of the State from $2,399,000 in 1917 to $8,314,000 in the year ending June 30, 1925. Under the new plan this would be increased by $4,000,000.

What would the State do with this additional money? Is there the remotest chance that it would reduce the tax on other property $4,000,000? Does any one who knows politics imagine it possible?

There is no need for this additional revenue, no excuse for its expenditure except the multiplication of political jobs and the duplication of political machinery of which the whole country has far too much already.

If this message can be got over to the people of Oklahoma their own common sense will defeat the proposal.

Beware of tax jugglers! The taxpayers always lose.

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Petroleum Exposition Open Next Week

Added Features, Larger and Improved Grounds and a Strong Congress Program. Big Crowds Expected

One week before the opening of the third International Petroleum Exposition and Congress, which will be the focal point of interest in Tulsa, October 1 to 10, sees every phase of the Exposition and Congress developed to a high point and all arrangements perfected, ready for the crowd of visitors.

The educational feature of the Exposition has been appreciated by the larger Mid-Continent and Gulf Coast oil companies to the extent that many have made arrangements to send heads of departments in the production, transportation and refining divisions, including engineers and other technical men and superintendents and foremen to the show under orders to make the most of the opportunity presented there to study the latest methods of operating.

Several special trains will be run from Chicago; the Pennsylvania fields; San Antonio, Tex.; Fort Worth and Dallas, Tex.; El Dorado, Ark., and perhaps Los Angeles, Cal., and Wichita, Kans. The Pennsylvania train will start from Bradford, Pa., on the evening of September 28, and will pick up passengers living "down the river," including Warren, Oil City, Titusville, Franklin, Butler and Pittsburgh. It will arrive in Tulsa over the Frisco lines on the morning of September 30. This is the "Grace Emery Special."

The General Exhibition

The general exhibits, to which the oil man turns to see the latest in machinery and processes, will include equipment touching the production, transportation, refining and distribution of oil, ranging from working models and ponderous machinery to the demonstration of chemical processes and explanatory literature, posters and photographs.

Fifty thousand dollars were spent on remodeling buildings and developing grounds for the benefit of the exhibitors and the convenience of visitors. Improvements were made in the 10 permanent buildings, of brick and steel construction and the grounds were rearranged to avoid traffic jams. Two and one-half acres of additional space have been added to the fair grounds of last year.

Strong Congress Program

Vying in interest for the serious-minded with the general exhibits and the scientific and historical exhibits, largely historical in nature, is the Petroleum Congress. It will be held in the Crystal Ballroom of the Mayo Hotel, and sessions will be in progress the mornings of Monday, Tuesday and Wednesday, October 5, 6 and 7, from 10 to 12 o'clock. W. G. Skelly, president of the Congress, will open the sessions, and will introduce Governor M. E. Trapp, who will give a short address. The program will include men who are famous as scientists, diplomats and speakers. The aim of those in charge of the Congress has been to arrange a program that would get immediately and directly at the problems in question, and actually accomplish something.

Plenty of Entertainment

When one approaches entertainment, the list is impressive. First there is the golf tournament, scheduled for October 6, 7 and 8, at the Tulsa Country Club. Any oil man from any country is eligible to enter, and 300 entrants have been listed. Handicaps will be so arranged as to give every player an opportunity to win one of the thirty cups and medals that will be awarded.

The Radio Revue will be presented every afternoon and evening at the Exposition theater, featuring well-known radio artists and vaudeville headliners in person. Picturesque scenic effects, attractive choruses and plenty of music and dancing will make it all that a revue should be. Audiences at the theater will also have the opportunity of seeing the Oil Princesses, who will be presented to the public at each performance.

Featuring the Oil Princesses

The Oil Princesses elected or appointed from 12 oil-producing States, are young women chosen because of certain qualifications, including beauty, personality, poise and charm. They are nearly all college girls, some coming from families prominently identified with the oil industry, and any one of the number would be capable of filling gracefully the office of Queen Petrolia, the position which will be conferred on one of them before the close of the Exposition, and which implies sovereignty over the entire Exposition. The Princesses, brought to Tulsa at the expense of the Exposition, will be feted during their visit here, which will terminate in the coronation of the fortunate girl elected Queen Petrolia Thursday night, October 8.

Three Street Pageants

Closely allied with the Princesses is the pageantry, a notable feature. Herbert Barnard, well-known designer and director, has charge of the three parades, which will be conducted the mornings of October 1, 3 and 9. The first is called the King's Parade, and all eyes are directed toward King Petroleum, Frederick Ernest Windsor of Warren, Pa., although not to the exclusion of the 1924 Queen Petrolia, Miss Ramona Marcella Trees, of Winfield, Kans., and the Oil Princesses from Kansas, Colorado, Pennsylvania, West Virginia, Montana, Wyoming, Arkansas, Louisiana, Texas and Ohio, on their State floats, and the Oklahoma Princess with her four Duchesses on the Oklahoma float. The second parade will be the Merchants' Parade, and the final one, the morning following the coronation of the new Queen Petrolia, the Queen's Parade.

The 10 days of the Exposition will be busy with social events given in honor of the visiting Princesses; luncheons, teas, receptions, dinners, dances. Particularly dignified and formal will be a reception for the delegates to the Congress, given by the board of governors the evening of October 5, the first day of the Congress.

Entertainment concessions of all kinds, and a midway embracing 21 shows and rides on the Exposition grounds will help to satisfy the most varied demands for amusement.

Parking Space Inside Grounds

Among the many improvements that have been made since last year, and one that will be appreciated by every exhibitor is the provision for parking automobiles inside the Exhibition gates. A giant fill, 75 feet wide by 685 feet long, makes it possible for automobile drivers to park their cars more conveniently this year than they did last year.

Because it has been clear for some time that crowds would be large, a housing committee has ascertained that Tulsa can accommodate all who come to visit the big oil show. They found the task easier because of the opening of three large hotels, the Mayo, the Albany, and the Densmore, since last fall; and they have supplemented their list of hotel lodgings by a record of rooms available in private residences.

Exposition Committees

The board of directors of the Exposition enlisted other oil men and leaders in other lines in the Exposition work by appointing them on the various committees and bringing them into the active work. The following men are included in the personnel of the committees:

Executive Committee—D. D. Wertzberger, chairman; Frank J. Hinderliter, O. C. Staples, A. B. Stilwell, H. B. Buchner, Frank Lang, Al Rose, F. J. Bradford and D. F. McCarty.

Congress and Convention—A. W. Leonard, chairman; James Gardner, Hon. E. B. Howard, F. W. Freeborn, Harry H. Smith, Howard Bennette, A. V. Bourque, W. H. Gray, John Zink, B. G. Creager and R. W. Hendee.

Scientific and Technical Committee—Alf G. Heggem, George Matson; W. K. Holmes, H. B. Bernard, E. L. Peck, F. B. Koontz, Russell McFarland and W. M. Welch.

Buildings and Grounds—F. J. Hinderliter, chairman; Ernest H. Cornelius, A. B. Patterson, W. H. Horster and J. M. Crutchfield.

Transportation Committee—O. C. Staples, chairman; Edward Wilson, vice chairman; E. N. Adams, E. O. Bittner, Grover B'air, Chester Bedley, J. A. Frates, Sr., Bert Hilburn, J. W. James, J. W. Klein, J. B. Rollman, M. S. Shanks and William Stotler.

Public Safety and Service: A. F. Bourne, chairman; Harry Kiskaddon; Wesley Bush and and Rees D. Moran.

Parades and Pageant—Fred Insull, chairman; Charles A. Myers, vice chairman; R. Otis McClintock, George Bender and Dr. Fred S. Clinton.

PETROLEUM CONGRESS AND OTHER OIL ASSOCIATIONAL GATHERINGS

The International Petroleum Congress, in connection with the Petroleum Exposition, promises this year to be the most interesting and helpful yet held. The Congress will convene on Monday, Tuesday and Wednesday, October 5, 6 and 7 in the Crystal ballroom of the Mayo Hotel, at 10 a. m. and will close each day at 12:30 p. m.

The list of speakers is a representative one and the subjects for the most part will be strictly practical and will cover important branches of the oil industry, including drilling, demand and supply, taxation, mineral resources, fuel oil, the service of chemistry, the part universities have played in the development of the industry, and statistics, and not only the problems of American oil men will be discussed, but those of some of foreign fields.

Leading oil men realizing the importance of the Congress are making every effort to impress upon oil companies and oil men the benefit that employes can obtain from attendance at the three sessions. The Crystal ballroom at the Mayo will hold a large audience and regardless of the weather will be comfortable.

Following is the program for the three days session:

Monday

W. G. Skelly, president of the International Petroleum Exposition and Congress, opening address.

M. E. Trapp, Governor of Oklahoma, address of welcome on behalf of the State.

J. Edgar Pew, president of the American Petroleum Institute, "American Oil Resources—Demand and Supply."

Dr. Santiago F. Bedoya, secretary of the Peruvian embassy and official representative of Peru.

W. R. Guiberson, official representative of California Chamber of Mines and Oil, "Taxation of Oil Properties."

Charles N. Gould, director of Oklahoma Geological Survey, "The Mineral Resources of Oklahoma and Their Relation to the Petroleum Industry."

Tuesday

D. M. Strickland, research engineer of the American Rolling Mill Co., "The Economy of Pure Iron in the Oil Industry."

K. C. Heald, chairman of the committee on studies in petroleum geology, National Research Council, "Deep Drilling."

Dr. Lucio Baldo, official representative from Venezuela, "Producing, Marketing and Transporting Oil Problems in Venezuela."

Henry J. Allen, former governor of Kansas, "Oil's Contribution to the Prosperity of the West."

Edward P. Bailey, past president and official representative of American Oil Burners Association, "Fuel Oil."

Dr. R. R. Mathews, chairman, petroleum division, American Chemical Society, "The Service of Chemistry in the Development of the Petroleum Industry."

Wednesday

Dr. Walter Dill Scott, president of Northwestern University, Chicago, "Contributions Which Have Been Made and Are Being Made by Universities Toward the Development and Progress of the Oil Industry."

Senor Francisco Sanchez Latour, minister from Gautemala and official representative of that country.

C. F. Kettering, president, General Motors Research Corp.

Glenn Griswold, editor, Chicago Journal of Commerce.

Dr. Hellmuth Wolff, Halle University, Germany, "The Establishment of the Statistical Service for Petroleum."

Mid-Continent's Banquet Program

The Oklahoma-Kansas division of the Mid-Continent Oil & Gas Association will meet on Wednesday, October 7. There will be a business meeting at 2:30 p. m. at the association headquarters in the Cosden building and a banquet at the Hotel Mayo at 6:30 p. m. Following the banquet a program of addresses will be given which will include the annual address of the president of the association, W. C. Franklin, of the Tidal Oil Co.; Governor M. E. Trapp in a welcome to the visitors; Isaiah Hale, safety superintendent of the Santa Fe Railroad system on "The Mind as a Factor in Industrial Accidents;" A. B. Flanary of Dallas, Tex., on "The Business Man," and a talk by C. F. Kettering, president of the General Motors Research Corp., on a topic to be selected by the speaker.

Scout Day, October 9

The Mid-Continent Oil Scouts Association will convene on "Scouts Day" at the Exposition which will be Friday, October 9. The scouts, who will come from all the Mid-Continent fields, will register at the Hotel Tulsa which will be their headquarters. A business meeting will be held in the course of the day and a banquet at the Hotel Tulsa at 6:30 p. m. followed by a dance. The banquet speakers will be D. W. Moffitt, vice president of the Mid-Continent Petroleum Corp.; D. F. Connolly, veteran producer and supply man, and Rush Greenslade, of the land department of the Gypsy Oil Co.

The Mid-Continent section of the American Society of Mining and Metallurgical Engineers will give a smoker and reception at the Hotel Mayo on Thursday evening, October 8.

The Knights of the Derrick will hold a business meeting on the Exposition grounds at 10:30 a. m. on Thursday, October 8.

The Sholom Alechem Society, a good-fellowship organization of oil men, mostly from the southern Oklahoma fields, will be well represented on one day of the show.

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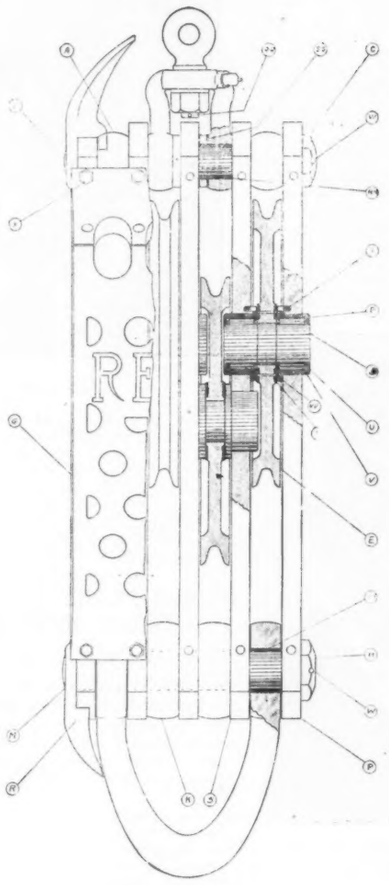

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Greater speed, higher efficiency and longer durability are outstanding features of the Regan Traveling Block. All of the objections and failures usually found in ordinary blocks are eliminated in this block. Each sheave rotating on its own individual pin, permits of the use of more liberal bearings whereas, the ordinary type has all the sheaves mounted on one stationary pin on which the sheaves rotate and of necessity are equipped with narrow bearings which have much shorter life.

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Late News From the Fields

NORTH CENTRAL TEXAS

FORT WORTH, Tex., Sept. 22.—Indications are that a new oil pool is about to be opened up in the North Young County territory, this time on the Olney townsite. Allen and others' No. 1 Dyer, in the northern part of the town is showing for a nice producer in a sand at just below 1,000 feet. This sand depth corresponds very favorably with sand depths of other producing pools in northern Young and southern Archer County.

While the new well has not been completed, it is now swabbing at the rate of about 75 bbls. daily from 17 feet of sand. The pay was topped at 1,019 feet and has been drilled to a total depth of 1,036 feet. Murchison & Fain, of Wichita Falls, it is reported, have already made location for another well on the townsite.

There are five new producers in the South Vernon Field of Wilbarger County which have not been listed among the completions. The Landreth Production Co.'s No. 2-B Waggoner is making 120 bbls. from sand at 2,091-94 feet. Lawson and others have two new wells on their Waggoner lease. They are Nos. 9 and 12, the former showing for 210 bbls. from 17 feet of pay topped at 2,010 feet, and the latter making 60 bbls. from the sand at 2,299-2,321 feet.

McCamey and others have a good producer in No. 22 Stephens in the heart of the South Vernon Pool. It is estimated making 150 bbls. at 1,943-59 feet. Bob Waggoner's No. 4 Bond is making 90 bbls. from sand at 1,280-1,310 feet.

The Reiter-Foster Corp. has another well on its Stubblefield lease in Throckmorton County, No. 2, which is reported to have made about 150 bbls. the first 24 hours from sand at 3,236-44 feet.

The Magnolia Petroleum Co. has drilled its No. 2 Foster in Mitchell County 4 feet deeper to a total depth of 2,972 feet and the production increased some. The first 12 hours after drilling deeper the well flowed about 110 bbls. by heads.

GULF COAST

HOUSTON, Tex., Sept. 22. — The Eagle Point Oil Co.'s No. 1 Jackson, in the Sour Lake Pool, is pumping 10 bbls. at 2,178 feet. Herring and others' No. 1, on the west side of the pool, is showing for a well.

In the Vinton (La.) Pool the Edgerly Petroleum Co.'s Nos. 8 and 9 Vincent are drilling, as is Marrs McLean's No. 8 Gray.

The Olyphant-Caldwell Co. is drilling No. 1 Giesencherberg in Burleson County. The Plateau Oil Co. is starting No. 1 Sharp in Travis County, near Austin. J. W. Allen is drilling No. 1 Klattendorf, in Williamson County.

In Washington County a test is being rigged 8 miles southwest of Brenham, and another near Burton.

In Victoria County, the Houston-Gulf Gas Co.'s No. 1, near Raisin, is drilling around 1,800 feet.

In Jefferson County, the Gulf Production Co.'s fourth formation test on the Fannette or Morey Dome, 12 miles southwest of Beaumont, is below 1,340 feet, without getting salt or gyp. The first test got gyp at 870 feet. The second, located 100 feet west, went into gyp at 910 feet. The third, 100 feet west of No. 2, went into the same formation at 1,100 feet. No. 4 is 100 feet west from No. 3. The Walton Oil Co.'s test 2 miles northwest of Beaumont, is drilling around 2,000 feet. It is being drilled by a company headed by the former governor of Oklahoma.

Charles Hooks is rigging for a test 5 miles west of Beaumont.

WELL ON OLNEY STREET

AUSTIN, Tex., Sept. 22.—Bringing in of a 60-bbl. oil well in the streets of Olney, Archer County, was reported to the oil and gas division Monday morning. A deputy supervisor was hurriedly sent to Olney to supervise the drilling on city lots. Considerable excitement over the prospect of a city full of oil derricks was reported. The well came in at about 1,000 feet.

CURTAILING IN CALIFORNIA

LOS ANGELES, Cal., Sept. 22.—The Standard Oil Co. of California and the Shell have shut in approximately 4,000 bbls. production in the Coalinga, Kern River and Torrance Fields, while the Associated Oil Co. is reducing its daily production at Kern River about 2,000 bbls. daily.

OKLAHOMA

In the Davenport Field, the Pure Oil Co.'s new well, No. 2 Jefferson, SE cor. SE Section 35-15-5, gauged 711 bbls. for Tuesday.

The Gypsy Oil Co'.s No. 1 Caves, NW cor. NW Section 11-14-5, had sand at 3,324-85 feet and made 212 bbls. the first day. It will be shot.

KANSAS

The Derby Oil Co., Streater & Stearns' No. 1 Dodge, SE cor. SW SW Section 32-11-15w, Russell County, Kansas, is reported to be good for 600 bbls. a day in the Oswald or Dodge sand at 2,790 feet.

OIL COMPANY LEADING ROAD SAFETY PLANS

Taking cognizance of the fact that in California alone last year 1,352 persons were killed and more than 40,000 were injured, the Union Oil Co. has announced its intention of diverting its newspaper and other advertising campaigns from more miles to the gallon to less deaths and injuries by the automobile.

Beginning October 15, the company will during the following 14 months spend more than $500,000 in urging motorists to be careful. The first broadside will appear October 15, and will be replaced on November 15 by a second poster.

The dicision of the company to spend over $500,000 on the "be careful" campaign was arrived at following a careful investigation into the huge toll in lives, injuries and property damage taken by automobile accidents. The company's new move is in line with the campaign being conducted by the California Safety Council, aided by many of the principal clubs on the coast and supporting the movement for street and highway safety headed by Secretary of Commerce Hoover.

"The Union Oil Co. is not seeking any particular credit for directing its advertising to the saving of lives and property," said L. P. St. Clair, vice president of the company. "It is simply that we have recognized the seriousness of the situation and are trying to contribute our share toward a change for the better. The campaign is based on our firm belief that the average motorist is not knowingly heedless or reckless. We believe that he errs merely because he becomes thoughtless. If we can impress upon him insistently by reminding him at every turn in the road that it requires only a little care to avoid accidents we are sure that we can aid in cutting down the number of casualties. Our efforts will seek not only to urge drivers to be more careful, but to remind them of the necessity of obeying the various traffic regulations."

GERMAN OIL MERGER

Merger of Deutsche Erdoel with Deutsche-Petroleum has been ratified. Deutsche Erdoel's representative in London says Deutsche-Petroleum will increase capital to 35,000,000 marks from 24,000,000 and create 4,500,000 marks income for bonds participating in profits after 8 per cent has been paid on share capital. The new company hopes, through elimination of refining and marketing duplications, to again compete favorably with Standard Oil and Shell. The latter owns Rhenania Duesseldorff, which in 1924 showed a loss of 4,500,000 marks. It is a leading German accusation that foreign companies are attempting to capture the German market, even where German companies showed losses. Since the dyestuff syndicate purchased the Stinnes oil companies, the German market is now effectively divided among but three companies.

OIL AND GAS TAX CHIEF TO HEAD CORPORATION

W. N. Thayer, widely known to the income tax payers of the petroleum industry, has resigned as chief of the Oil and Gas Section, Income Tax Unit, Treasury Department, Washington, D. C., according to an announcement of the past week. Mr. Thayer held this position for three and one-half years, during which period he came in tontact with a majority of the oil producers throughout the United States.

Mr. Thayer resigned to accept the presidency of the National Petroleum Engineering Corp., a recently organized corporation which will specialize in petroleum engineering and geology, in which Mr. Thayer was engaged previous to his employment by the Government.

Associated with Mr. Thayer are D. D. Finley, vice president, and Harry A. Campbell, secretary and treasurer. The former has been engaged in geological work in the Mid-Continent Field, and the latter, who was formerly assistant chief of the Oil and Gas Section of the Income Tax Unit, is in charge of the tax department of a Tulsa law firm.

—Photo by Rivkin.
W. N. Thayer

F. Lee Stewart, who has been engaged in engineering work in the Mid-Continent Field for 16 years, is a director of the corporation and a member of the engineering staff. During this period he was for 8 years chief construction engineer of the Roxana Petroleum Corp. Mr. Stewart has had a broad experience in the design, construction and operation of oil field plants. Offices of the company will be located in Washington, Tulsa and Los Angeles.

PROSPECTING IN BRAZIL

According to a report from Assistant Trade Commissioner A. O. Pierrot, Rio de Janeiro, prospecting for oil continues in the States of Alagoas, Bahia, Sao Paulo and Parana. This is in addition to the recent investigations in the vicinity of Alfenas, Minas Geraes, where a geologist of the State Government reported the discovery of considerable areas of shale sufficiently rich to warrant its exploitation.

REED MADE DIRECTOR ROTARY DEPARTMENT

C. E. Reed, formerly president and general manager of the Reed Roller Bit Co., of Houston, Tex., has been made vice president and director of rotary tool manufacturing for the Bridgeport Machine Co., of Wichita, Kans.

President J. A. Woods of the Bridgeport Co., in announcing the appointment of Mr. Reed said that the Bridgeport planned to engage in the manufacture of both standard and rotary bits and other drilling tools. Plans for a rotary bit plant for the Bridgeport are now in the hands of Mr. Reed.

C. E. Reed

Early in 1925, Mr. Reed retired from the Reed Roller Bit Co., which he founded in 1912.

SHALE PLANT ADDING THREE NEW RETORTS

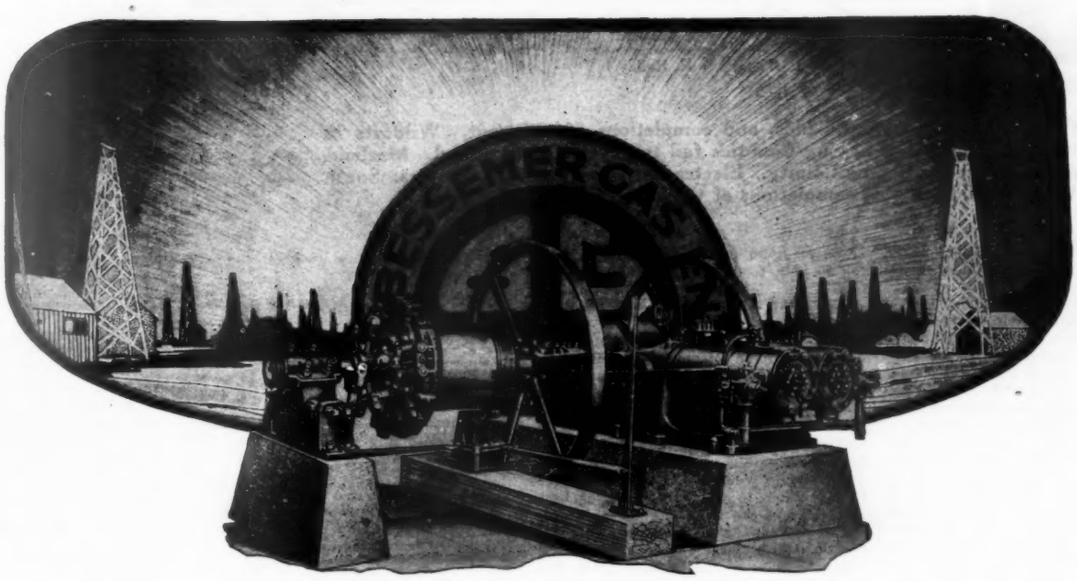
LOS ANGELES, Cal., Sept. 19.—Diatom Products, Inc., of Los Angeles, is building three retorts, and is increasing the capacity of its reduction and manufacturing plant at Shurman Cut, near Santa Maria, Santa Barbara County, to handle 1,000 tons of oil shale daily.

The company's plant, constructed for the extraction of oil from shale, and the manufacture of a number of commercial by-products, has been in operation for sometime. From the oil extracted from shale the company is manufacturing fuel oil, flotation oil and lubricating oil, while from the residuum it is making several products, such as filtering powder, insulating powder, insecticides, insulating brick, calcined aggregate and tile. The flotation oil is in demand by mining companies in the concentration of ores, while the filtering powder is employed by oil companies in preparing gasoline for the market.

S. Ford Eaton, formerly with the company, has resumed his executive position in its service and will act as consulting engineer. George W. Bunton, until recently secretary of the Van Nuys Chamber of Commerce, is now secretary.

TO REVISE TAX RULES

AUSTIN, Tex., Sept. 22.—Oil and gas conservation rules of the State Railroad Commission will be revised, following a conference to be held here September 28 between the officials and operators in all fields of the State. "The purpose of the rules and the law is to protect not only the oil and gas industries, but also the public, and not only the citizens of today but those of future generations," Commissioner C. V. Terrell said. The present rules have been in effect five years.



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BESSEMER

BESSEMER OIL FIELD ENGINES – COMPRESSORS VACUUM PUMPS – ROLLER PUMPING POWERS

North-Central Texas Field

By George R. Kelley

Production declines 5,000 bbls. and completions 50 per cent. Wildcats in Howard, Upton and Loving Counties fail to develop as expected. Marland gets producer in Carson County. Electra has several good producers. South Vernon Field has best completions of week and for several months.

FORT WORTH, Tex., Sept. 21.—None of the outstanding wildcat tests that early in the week promised to show something interesting has developed into anything worth while. Neither the Deep Rock Oil Co.'s Scott well in Howard County, McCamey and others' Baker well in Upton County nor the P. V. Petroleum Co.'s Chapman-Wheat well in Loving County have turned in anything exciting or even worthy of particular mention.

The Deep Rock Co. is working on its test at a little less than 1,400 feet and indications are it will make a small producer at that depth. The Baker test of McCamey and others in the southwest corner of Upton County and 25 miles southwest of the Big Lake Field is not nearly so interesting as first reports indicated. Early in the week this well was reported standing 1,800 feet in oil at a depth of 2,156 feet. In the first place this report seemed to be in error, though the well did make some oil at that depth.

The test has been bailed dry now and at present it is shut down awaiting arrival of fuel oil to resume work. Indications are the showing of oil came from a sort of pocket rather than from any fair volume of sand. However, this test is regarded as very favorable. All of the major companies have close in acreage and a number of well known geologists have carefully checked the structure on which the test is located. Production has naturally been expected by all concerned and further operations will be watched with much interest.

In Loving County the Chapman-Wheat well of the P. V. Petroleum Co. has been drilled 1 foot deeper to a total depth of 4,264 feet. The additional drilling failed to increase the showing for oil and at present the well is shut down. It is said the owners have reached no decision as to whether the well will be carried deeper.

Carson County Producer

The Texas Panhandle came a little into the ligmelight this week when the Marland Oil Co.'s No. 3 on the Burnett ranch in Carson County came in showing for a good producer. It has not been completed but on the first gauge made about 200 bbls. in four hours. The well is producing from a sandy lime formation at 2,977 to 3,010 feet and from a granite wash formation from 3,010 to 3.068 feet, which is the total depth. Efforts are being made to bring the well to completion. It is an inside location.

In the Nocona shallow sand field of northern Montague County the Texhoma Oil & Refining Co. has a new producer in No. 1 Rowland. The well is not completed but is standing 600 feet in oil from a sand at 832 to 845 feet. Indications are the well will be good for something like 30 bbls. daily.

Several new producers are reported from the Electra Field, most of them being on the Grace Jennings farm in the old Electra district. Bullington and associates have two new wells on this lease, neither a completion. Their No. 4 Jennings is reported good for 35 bbls. on a 12-hour test at 1,470 to 1,480 feet and No. 5 Jennings is estimated as a 25-bbl. well at 1,470 to 1.481 feet.

The Dale Oil Corp. also has two new producers on this farm. Its No. 2 is a producer making 25 bbls. from sand at 1,573 to 1,596 feet and No. 13 is good for 45 bbls. from sand at 1,474 to 1,482 feet.

Jones and others' No. 2 Jennings is in a producing sand at 1,810 to 1,814 feet and is estimated to be making about 20 bbls. daily. The Texhoma Oil & Refining Co.'s No. 3 John and Jeff Waggoner, also in the Electra district, is a good producer, the best reported from Electra during the week. The well though not completed is making 100 bbls. from sand at 1,759 to 1,763 feet.

The South Vernon Field in Wilbarger County came to the front with the best new wells of the week and the best producers reported from that area in some month. Both large wells are on the Stephens lease of the Humble Oil & Refining Co., but neither is completed. No. 30 Stephens is making 20 bbls. an hour from sand at 2,351 to 2,395 feet and No. 32 is flowing between 600 and 700 bbls. daily from sand at 2,364 to 2,400 feet. The Stephens lease is an inside lease in the South Vernon Pool and was purchased by the Humble Oil & Refining Co. last spring from the South Vernon Oil Co., discoverers of the South Vernon Pool.

Murchison & Fain of Wichita Falls also have a producer in Wilbarger County. It is No. 1-D Waggoner, which is in sand from 1,295 to 1,312 feet and is flowing by heads making about 5 bbls. an hour, according to estimates.

Production Declines

Production in this territory shows a decline of more than 5,000 bbls. from the daily average of the previous week. The principal decline was in Reagan County, where there was a big flush production recorded last week. The Big Lake Field in Reagan County is showing a production of 35,000 bbls. daily, 3,450 bbls. less daily than for the previous week. Archer County, Stephens County and Young County also registered losses that made up for the balance of the more than 5,000-bbl. decline. Total daily runs are 169,551 bbls. That for the previous week was 174,568 bbls., a loss of 5,017 bbls. daily.

In the past month the number of completions in this territory has fallen off nearly 50 per cent. Five weeks ago the district reached the peak in completions for the year with a total for the week of 120. Since there has been a gradual decline in the weekly completions until the week shows a total of only 66 compared with 96 the previous week. The weakening of the crude market seems to have had its effect.

There was a marked falling off in the number of completions from several of the most active counties. Archer County did fairly well with a total of 23, but there were only 7 in Wichita County, 4 in Wilbarger County and 9 in Young County. Stephens County recorded four completions, Eastland County three and Reagan County only one. There were 15 in the wildcat counties.

Out of the 66 completions for the week, 43 were oil producers and 23 were dry holes. New production for the week amounted to 4,277 bbls., compared with 8,587 bbls. from 50 producers the previous week.

The following table gives the completions by counties, together with the totals for the previous week for comparison:

Dist.—	Comp.	Prod.	Dry	Gas	New Prod.
Wichita	7	5	2	0	211
Wilbarger	4	2	2	0	270
Archer	23	15	8	0	1,137
Young	9	6	3	0	980
Stephens	4	2	2	0	*485
Eastland	3	2	1	0	330
Reagan	1	1	0	0	648
Wildcats	15	10	5	0	926
Total	66	43	23	0	4,277
Last week	96	50	44	2	8,587
Difference	30	7	21	2	4,310

*Stephens County, 1,800,000 feet of gas.

PRODUCTION REPORT
For the Week Ending September 17.

Burkburnett		
Gulf Production Co.	550	
Humble Oil & Refining Co.	380	
Magnolia Petroleum Co.	2,895	
Panhandle Refining Co.	350	
Prairie Oil & Gas Co.	25	
Sinclair Oil & Gas Co.	60	
Sun Oil Co.	110	
The Texas Co.	450	
Texhoma Oil & Refining Co.	465	
Miscellaneous	8,811	
Total		14,096
Electra		
Empire Gas & Fuel Co.	1,015	
Gulf Production Co.	830	
Humble Oil & Refining Co.	130	
Magnolia Petroleum Co.	3,700	
Panhandle Refining Co.	55	
Prairie Oil & Gas Co.	130	
The Texas Co.	3,610	
Texhoma Oil & Refining Co.	1,705	
Miscellaneous	6,200	
Total		17,375
Iowa Park		
Gulf Production Co.	40	
Humble Oil & Refining Co.	385	
Magnolia Petroleum Co.	675	
Panhandle Refining Co.	45	
The Texas Co.	550	
Texhoma Oil & Refining Co.	50	
Miscellaneous	4,240	
Total		5,985
Archer County		
Empire Gas & Fuel Co.	685	
Gulf Production Co.	2,375	
Humble Oil & Refining Co.	595	
Magnolia Petroleum Co.	1,375	
Panhandle Refining Co.	240	
Prairie Oil & Gas Co.	3,695	
Sun Oil Co.	60	
The Texas Co.	2,880	
Texhoma Oil & Refining Co.	2,200	
Miscellaneous	21,985	
Total		36,090
Stephens County		
Empire Gas & Fuel Co.	60	
Gulf Production Co.	1,495	
Humble Oil & Refining Co.	765	
Magnolia Petroleum Co.	520	
Mid-Kansas Oil & Gas Co.	1,390	
Prairie Oil & Gas Co.	950	
Sinclair Oil & Gas Co.	85	
Sun Oil Co.	220	
The Texas Co.	1,350	
T. P. Coal & Oil Co.	1,195	
Miscellaneous	5,530	
Total		13,560
Ranger		
Gulf Production Co.	280	
Humble Oil & Refining Co.	40	
Magnolia Petroleum Co.	625	
Mid-Kansas Oil & Gas Co.	205	
Panhandle Refining Co.	170	
Prairie Oil & Gas Co.	705	
Sinclair Oil & Gas Co.	350	
The Texas Co.	165	
T. P. Coal & Oil Co.	870	
Miscellaneous	3,000	
Total		6,410
Eastland-Comanche		
Empire Gas & Fuel Co.	10	
Humble Oil & Refining Co.	60	
Magnolia Petroleum Co.	955	
Mid-Kansas Oil & Gas Co.	225	
Prairie Oil & Gas Co.	125	
Sinclair Oil & Gas Co.	30	
The Texas Co.	150	
T. P. Coal & Oil Co.	110	
Miscellaneous	1,795	
Total		3,460
Panhandle		
Carson County	2,555	
Hutchinson	1,525	
Wheeler County	105	
Gray County	65	
Potter County	55	
Total		4,305
Moran		
Empire Gas & Fuel Co.	35	
Prairie Oil & Gas Co.	20	
The Texas Co.	445	
Texhoma Oil & Refining Co.	109	
Miscellaneous	2,580	
Total		3,189
Young County		
Gulf Production Co.	395	
Humble Oil & Refining Co.	1,160	
Magnolia Petroleum Co.	490	
Mid-Kansas Oil & Gas Co.	15	
Panhandle Refining Co.	210	
Prairie Oil & Gas Co.	10	
Sinclair Oil & Gas Co.	390	
Sun Oil Co.	60	
The Texas Co.	985	
Texhoma Oil & Refining Co.	125	
Miscellaneous	7,125	
Total		10,965
Miscellaneous Pools		
Wilbarger County	8,600	
Clay County	375	
Montague County	335	
Jack County	30	
Throckmorton County	200	
Baylor County	190	
Palo Pinto County	590	
Brown County	2,815	
Coleman County	275	
Callahan County	2 915	
Mitchell County	2,750	
Reagan County	35,000	
Scurry County	50	
Total		54,125
Total this week		169,551
Total last week		174,568
Loss		5,017

Completions—Wichita County

Burt and others' No. 1 Van Horn, dry at 2 001 feet; Humble Oil & Refining Co.'s No. 6 Allen & Kemp, dry at 1,950 feet; No. 49 Rio Bravo, 4 bbls. at 2,110 feet; Petroleum Producers' No. 14 Allen & Kemp, 50 bbls. at 1,651 feet; No. 15 Allen & Kemp, 105 bbls. at 1,648 feet; Straus & Allen's No. 7 Allen & Kemp, 40 bbls. at 1,647 feet.

Wilbarger County

E. A. Durham and others' No. 3 Waggoner, dry at 2,200 feet; Landreth Production Corp.'s No. 1-A Waggoner, 230 bbls. at 1,864 feet; Ray & Massie's No. 7 Bond, 40 bbls. at 1,302 feet; Wilbert Oil Co.'s No. 1-D Waggoner, dry at 2,302 feet.

Archer County

O. P. Burton and others' No. 1 L. F. Wilson, dry at 1,612 feet; George L. Pace and others' No. 2 Nichols, dry at 1,642 feet; Waite Phillips Co.'s No. 19 L. F. Wilson, 172 bbls. at 1,549 feet; No. 23 L. F. Wilson 50 bbls. at 1,544 feet; No. 24 L. F. Wilson, 65 bbls. at 1,535 feet; No. 25 L. F. Wilson, 48 bbls. at 1,517 feet; No. 86 J. H. White, 25 bbls. at 1 615 feet; Smith & Trahan's No. 1 Perkins and others, dry at 1,764 feet; Texhoma Oil & Refining Co.'s No. 7-A Taylor, 59 bbls. at 1,606 feet; Wichtex-Dixie's No. 1 A. P. Jackson, dry at 1,651 feet; Wilson Drilling Co.'s No. 1-A L. F. Wilson, 65 bbls. at 1,624 feet; Burton & Ruff and others' No. 4 L. F. Wilson, 100 bbls. at 1,525 feet; No. 6 L. F. Wilson, 178 bbls. at 1,524 feet; Woodburn Oil Corp.'s No. 22-A L. F. Wilson, 100 bbls. at 1,599 feet; Batchelor & Kennedy's No. 1 H. G. Lemon, dry at 1,511 feet; Gwynn and others' No. 1 Neal, dry at 1,202 feet; Mooers and others' No. 9 Ickert, 20 bbls. at 1,230 feet; Mooers and others' No. 1 Ickert, 20 bbls. at 1,230 feet; Murchison & Fain's No. 2 Hausler, dry at 1,139 feet; Prairie Oil & Gas Co.'s No. 2-D Richardson, 140 bbls. at 1,306 feet; No. 28 Richardson and others, 48 bbls. at 1,290 feet; Simms Oil Co.'s No. 1 Cowan estate Block 63, dry at 1,207 feet; The Texas Co.'s No. 9 Hill, 35 bbls. at 1,370 feet; No. 10 Rogers, 32 bbls. at 1,275 feet.

Young County

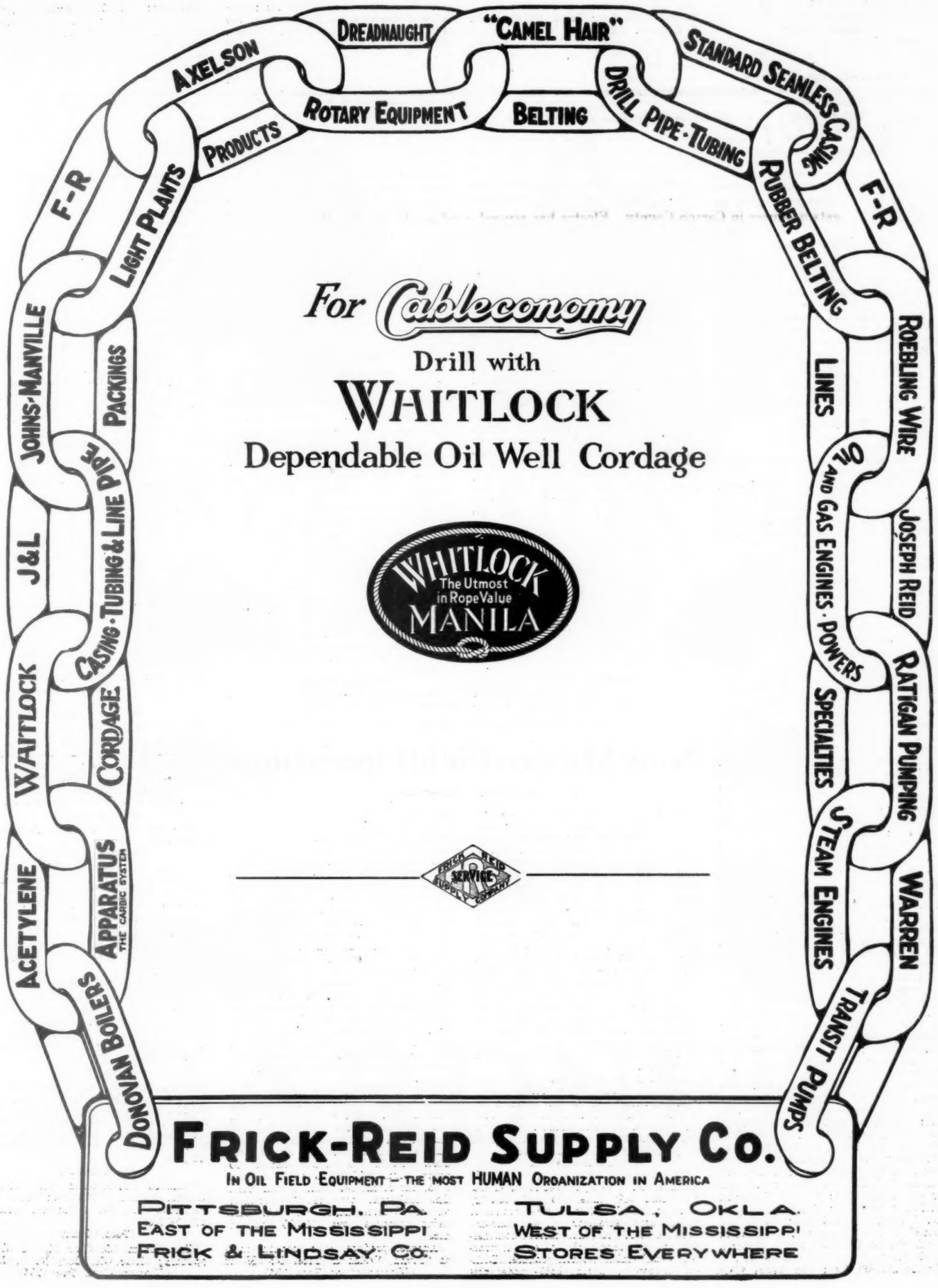
Clark and others' No. 2 Bishop, 66 bbls. at 993 feet; No. 3 Bishop, dry at 1,050 feet; Mooers and others' No. 6 Ikert, 25 bbls. at 1,229 feet; Navarro Oil Co.'s No. 1 Parish, dry at 1,250 feet; Roeser & Pendleton's No. 1 Cathey, 100 bbls. at 1,194 feet; The Texas Co.'s No. 1 Kunkel, 62 bbls. at 1,202 feet; No. 1 Wilson and others' dry at 1,382 feet; Texas Unity Oil Co.'s No. 9 Hausler, 12 bbls. at 1,082 feet; No. 10 Hausler, 15 bbls. at 1,082 feet.

Stephens County

Houston and others' No. 1 Fletcher, dry at 2,240 feet; Phillips Petroleum Co.'s No. 1 Tarrant, dry at 3,800 feet; T. P. Coal & Oil Co.'s No. 2 Hand, 480 bbls. at 3,720 feet; The Texas Co.'s No. 37-A Parks, 5 bbls. oil and 18,000,000 feet gas at 3 222 feet.

Eastland County

Robert Oil Corp.'s No. 6 McMinn, 300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STORES EVERYWHERE

bbls. at 1,408 feet; Sinclair Oil & Gas Co.'s No. 8 Davis, 30 bbls. at 3,711 feet.

Reagan County

Texon Oil & Land Co.'s No. 1 University, Group 1, 638 bbls. at 2,937 feet.

Wildcats—Hutchinson County

W. T. Coble and others' No. 1 Whittenburg, 100 bbls. at 2,962 feet.

Baylor County

Dallas Oil Co.'s No. 1 Shawver, dry at 1,900 feet; McDonald & Smith's No. 4 Upshur So. S. L., dry at 1,667 feet.

Montague County

Newblock Oil Co.'s No. 2 Maddox, 45 bbls. at 915 feet; Lesh & McCall's No. 2-R Hynds, 10 bbls. at 915 feet; Texhoma & W. Johnson's No. 5 Howard, dry at 1,837 feet.

Shackelford County

Hays and others' No. 2 Leschber, 6 bbls. at 446 feet; Humble Oil & Refining Co.'s No. 2 Palm, dry at 510 feet; Phillips No. 7 Parrish, 200 bbls. at 2,111 feet.

Callahan County

Cranfill & Reynolds' No. 1 Block 57, dry at 1,652 feet; Harris & White's No. 1 Block 25, 80 bbls. at 1,424 feet; Urban and others' No. 1 Finley, 12 bbls. at 2,367 feet; Weiler Brothers' No. 1 Block 89, 180 bbls. at 1,431 feet; Schaffner & Wilson's No. 1 Prather, 480 bbls. at 1,309 feet.

Scurry County

Northwest Oil Co.'s No. 1 Newman, 25 bbls. at 1,880 feet.

Drilling Operations, Wilbarger County

Atlantic Oil Producing Co.'s No. 2 Sigler-Waggoner is fishing at 1,285 feet; No. 3 Zipperle, standardizing; Barkley and others' No. 2-A Stephens, underreaming; No. 4-A Stephens, drilling 1,055 feet; Bridwell and others' No. 11 Dill, fishing at 2,050 feet; No. 10 Stephens, drilling at 2,370 feet; No. 11 Stephens, 2,372 feet; Consolidated Oil Co.'s No. 1 Waggoner (Section 4) underreaming; Continental Oil Co.'s No. 3 Zipperle, drilling deeper at 2,336 feet; Culberson and others' No. 1 Berry, fishing at 1,800 feet; Durham and others' No. 1 Waggoner, drilling at 2,320 feet; No. 2 Waggoner, 2,240 feet; Giles and others' No. 1 Rutledge, 1,600 feet; Herbert Oil Co.'s No. 1 Waggoner, 1,570 feet; Hoffer Oil Corp.'s No. 1 Waggoner, 220 feet; Humble Oil & Refining Co.'s No. 18 Castlebury, 1,835 feet; No. 20 Castlebury, 716 feet; No. 34 Castlebury, fishing at 1,380 feet; No. 35 Castlebury, 1,951 feet; No. 2-D Waggoner, 2,097 feet; No. 3-D Waggoner, 1,354 feet; No. 1-E Waggoner, cleaning out at 1,985 feet; No. 2-G Waggoner, drilling at 1,530 feet; No. 1-H Waggoner, 1,925 feet; No. 1-I Waggoner, 1,040 feet; Kimberlin and others' No. 1 Castlebury, 2,124 feet; Kolp and others' No. 8 Waggoner, re-cementing casing at 2,288 feet; No. 9 Waggoner, drilling at 1,630 feet; No. 10 Waggoner, 900 feet; Landreth Production Co.'s No. 1-D Waggoner, 1,800 feet; No. 2-D Waggoner, on sand at 1,874 feet; No. 3-D Waggoner, drilling at 1,480 feet; No. 1-F Waggoner, showing oil at 1,884 feet; No. 1-I Waggoner, cleaning out at 1,365 feet; No. 1-M Waggoner, drilling at 1,270 feet; Lawson and others' No. 13 Waggoner, 2,287 feet; McCamey and others' No. 5 Stephens, 2,247 feet; No. 13 Stephens, 2,060 feet; No. 14 Stephens, 2,050 feet; No. 23 Stephens, 1,730 feet; McLester Oil Co.'s No. 1 Waggoner, 2,190 feet; Magnolia Petroleum Co.'s No. 50 Sumner, 890 feet; No. 1 Jiggs-Waggoner, underreaming; Milham Corp.'s No. 1-A Waggoner, drilling at 2,240 feet; No. 1-B Waggoner, 2,274 feet; No. 2-H Waggoner, spudding; Murchison and others' No. 2-D Waggoner, fishing at 1,732 feet; Petroleum Producers Co.'s No. 6 Dill, drilling at 1,860 feet; Prairie Oil & Gas Co.'s No. 1-B Waggoner, fishing at 1,310 feet; Pratt and others' No. 1 Waggoner, drilling at 1,570 feet; Roxana Petroleum Co.'s No. 1-A Waggoner, cleaning out at 1,645 feet; No. 1-B Waggoner, drilling at 1,806 feet; Shipley and others' No. 1 Murphy, 2,484 feet; Smith and others' No. 1 Waggoner, 1,815 feet; South Vernon Oil Co.'s No. 1 Zipperle, 2,192 feet; Staley and others' No. 5 Stephens, 1,550 feet; The Texas Co.'s No. 1-C Castlebury, 1,710 feet; No. 1 Owens, 2,850 feet; Travis Oil Co.'s No. 2 Zipperle, 2,240 feet; Tidal Oil Co.'s No. 1 Waggoner, 2,160 feet; Upham Co.'s No. 1 Waggoner, fishing at 2,310 feet; Whiber Oil Corp.'s No. 1-B Waggoner, fishing at 1,370 feet; No. 1-C Waggoner, fishing at 1,810 feet.

Stephens County

Collins and others' No. 1 Cunningham, drilling at 1,550 feet; Mid-Kansas Oil & Gas Co.'s No. 17 Hill, 2,800 feet; No. 6 Hill, 2,355 feet; Mid-Tex Oil Co.'s No. 2 Cunningham, 2,515 feet; Moore and others' No. 1 Cunningham, cementing casing at 3,060 feet; Raney and others' No. 1 Hamil, drilling at 3,450 feet; Swensondale Oil Co.'s No. 8 Cobb, fishing at 3,323 feet; No. 1 Echols, drilling at 3,562 feet; Texas Pacific Coal & Oil Co.'s No. 1 Donnell, setting casing at 1,665 feet; No. 4 Kirtley, cementing casing at 2,940 feet; Bateman and others' No. 1 Compton, drilling at 400 feet; Clark and others' No. 1 Litton, spudding; Cosby Oil & Gas Co.'s No. 1 Satterfield, drilling at 3,050 feet; Edison and others' No. 3 Crowley, 1,000 feet; Hagaman Refining Co.'s No. 1 Hagaman, 2,850 feet; Hughes and others' No. 1 Williams, 2,950 feet; Kleinfelder and others' No. 3 Grimes, 2,980 feet; Landreth Production Co.'s No. 1 Elliott, 2,610 feet; No. 3 Gratz, making 5,000,000 feet of gas at 3,134 feet; McLester Oil Co.'s No. 1 Klein, drilling at 1,550 feet; Phillips Petroleum Co.'s No. 1 Pace, 2,285 feet; Prairie Oil & Gas Co.'s No. 4 Ware, 3,580 feet; Quakins Petroleum Co.'s No. 11 Harmon, 800 feet; Scott and others' No. 1 Whalen, 2,750 feet; States Oil Corp.'s No. 1 Cooper, 2,400 feet; No. 2 Cooper, spudding; No. 1 Hawkins, fishing at 2,300 feet; No. 2 Sikes, drilling at 2,070 feet; Texas Pacific Coal & Oil Co.'s No. 57 Binney, fishing at 1,827 feet; No. 8 Veale, plugging back to 3,676 feet; No. 9 Veale, cleaning out at 3,172 feet; The Texas Co.'s No. 11 Curry, drilling at 820 feet; No. 3 Vick, 3,080 feet; Walker-Caldwell Co.'s No. 3 Jones, fishing at 3,785 feet.

Eastland County

Brewer and others' No. 1 Stephens, drilling at 2,705 feet; Corzelius & Taggert's No. 2 Brashear, 2,000 feet; Corzelius & Gordon's No. 1 Waggoner, 700 feet; Gallagher and others' No. 1 Woods, showing oil at 3,086 feet; Halmack Oil Co.'s No. 6 Thompson, 3,280 feet; Humble Oil & Refining Co.'s No. 5 Davis, drilling deeper at 2,800 feet; Magnolia Petroleum Co.'s No. 7 Allman, drilling at 615 feet; No. 1 Bishop, 2,740 feet; Mid-Kansas Oil & Gas Co.'s No. 1 Williams, 1,150 feet; Parsons and others' No. 1 Blackwell, 1,350 feet; Robert Oil Corp.'s No. 4 Ford, fishing at 1,240 feet; Woods and others' No. 1 Collins, spudding; Corzelius Brothers' No. 1 Dulin, fishing at 1,200 feet; Hoffer Oil Corp.'s No. 1 Hitson, drilling at 2,400 feet; Holliday and others' No. 1 Raney, 1,700 feet; Pitzer and others' No. 1 Rust 3,697 feet; Reeves and others' No. 1 Leveridge, 1,200 feet; Root and others' No. 1 Hart, 300 feet; No. 1 Luse, 890 feet; No. 1 Pelfry, underreaming; Rambough and others' No. 1 White, running casing at 430 feet; States Oil Corp.'s No. 1 Johnson, spudding; No. 2 Stubblefield, drilling at 800 feet; Texas Development Co.'s No. 2 Rushing, 3,060 feet.

Brown County

Adams and others' No. 1 Newton, reaming at 2,315 feet; Cal-Bro Oil Syndicate's No. 2 Prather, drilling at 1,299 feet; Conway Brothers' No. 1 Woodridge, spudding; Evans and others' No. 1 McDonough, resetting casing at 1,312 feet; Gillman and others' No. 17 Newton, 1,240 feet; Gillman and McMurray's No. 6 Moore, 1,180 feet; Hughes Development Co.'s No. 2 Moore, 980 feet; Infield Petroleum Co.'s No. 1 Graham, showing gas at 1,200 feet; Moore and others' No. 5 Baxter, drilling at 1,230 feet; No. 6 Baxter, 600 feet; No. 1 Kilgore, 997 feet; Moore and Wilson's No. 7 Gafford, on sand at 1,250 feet; No. 8 Gafford, drilling at 900 feet; Olympia Oil & Refining Co.'s No. 3 Gilliam, 2,370 feet; Simms Oil Co.'s No. 2 Gaines, spudding; Slick and others' No. 1 Windham, showing gas at 2,365 feet; Stone and others' No. 3 Gunn, drilling at 800 feet.

Reagan County

Big Lake Oil Co.'s No. 30 University, fishing at 2,615 feet; No. 31 University, 2,900 feet; No. 37 University, cleaning out at 2,470 feet; No. 41 University, drilling at 2,445 feet; No. 44 University, 1,990 feet; No. 45 University, 2,455 feet; No. 46 University, running casing at 2,929 feet; No. 47 University, drilling at 790 feet; No. 48 University, 520 feet; No. 49 University, 100 feet; Marland Oil Co.'s No. 1 Wilson, 2,020 feet; Texon Oil & Land Co.'s No. 22 Group 1 University, 2,720 feet; No. 23 Group 1 University, underreaming; No. 27 Group 1 University, setting casing at 2,885 feet.

Wildcats—Chackelford County

Cameron and others' No. 1 Jones, on sand at 670 feet; Conley and others' No. 1 Parrish, underreaming; Domestic Oil Co.'s No. 1 Colbert driling at 1,290 feet; French and others' No. 1 Dillar, 870 feet; Hayes and others' No. 1 Matthews, 200 feet; Hope Petroleum Co.'s No. 1 Newell, 925 feet; HTumble Oil & Refining Co.'s No. 2 Elliott, underreaming; No. 1 McLemore, fishing at 2,557 feet; Kent and others' No. 1 Bernstein, drilling at 490 feet; Mid-Kansas Oil & Gas Co.'s No. 1 Newell, 120 feet; Milrham Corp.'s No. 1 Claussell, 2,355 feet; Moutray Oil Co.'s No. 1 Snyder, 635 feet; Phillips Petroleum Co.'s No. 2 Compton, 945 feet; No. 1 Fry, 1,520 feet; No. 8 Parrish, 1,015 feet; Riley and others' No. 1 Myer, plugging back to 1,008 feet; Taylor and others' No. 1 Fincher, fishing at 1,016 feet.

Callahan County

Brannon and others' No. 1, Block 85, drilling at 1,390 feet; Cranfill and others' No. 1, Block 74, 400 feet; No. 1, Block 90, 1,330 feet; French and others' No. 1 Hinds, 700 feet; Harris and others' No. 2, Block 25, 400 feet; Inland Oil Co.'s No. 1, Block 59, spudding; May and others' No. 1, Block 84, drilling at 725 feet; Moore and others' No. 1 White, 1,040 feet; Red Moore's No. 1, Block 75, 475 feet; Neeb and others' No. 1, Block 10, fishing at 475 feet; Skinner and others' No. 1, Block 73, underreaming; Stone and others' No. 1, Block 69, spudding; Suddereth and others' No. 1 Thorn, drilling at 270 feet; Wakefield and others' No. 1, Block 88, 240 feet; No. 1 Derrington, 500 feet; Warnie and others' No. 1, Block 6, 1,250 feet; Weiler and others' No. 1, Block 83, 900 feet.

Mitchell County

Atlantic Production Co.'s No. 1 Womack, drilling at 1,250 feet; Eastland Oil Co.'s No. 1 Elder, 1,220 feet; No. 4 Keynard, 2,425 feet; Henshaw and others' No. 1 Scott, 2,510 feet; Green and others' No. 1 Elwood, 600 feet; California Co.'s No. 14 Morrison, 2,704 feet.

Howard County

Hyer and others' No. 1 Clay, drilling at 190 feet.

Culberson County

Gresham Brothers' No. 1 Fee, drilling at 2,910 feet; California Co.'s No. 1 Gresham, fishing at 934 feet; Pure Oil Co.'s No. 1 Quaid, fishing at 35 feet.

Loving County

P. V. Petroleum Co.'s No. 1 Chapman-Wheat, drilling at 4,264 feet; Rio Grande Oil & Refining Co.'s No. 1 Kyle, 150 feet.

Sterling County

Wrightsman Petroleum Co.'s No. 1 Foster, drilling at 1,709 feet; No. 1 Hull, fishing at 3,030 feet; White Eagle Oil & Refining Co.'s No. 1 Mills, fishing at 470 feet; Rummel and others' No. 1 Clark, drilling at 200 feet.

Coleman County

Canyon Oil & Gas Co.'s No. 1 Harris, fishing at 1,640 feet; Ratbloot and others' No. 1 Pipe, driling at 600 feet; The Texas Co.'s No. 1 Hall, 700 feet; Wright and others' No. 1 Nicholson, 200 feet; Monroe Production Co.'s No. 1 Overall, 345 feet.

Crane County

Penn-Tex Development Co.'s No. 1 Cowden, drilling at 150 feet; Texas Development Co.'s No. 1 Cowden, drilling at 2,784 feet.

Pecos County

Tom Adams Oil Co.'s No 1. Gray, spudding; Dixie Oil Co.'s No. 1 Sher-

(Continued on Page 135)

New Mexico Field Operations

By Special Correspondent

ARTESIA, N. M., Sept. 19.—A new pool east of the present productive area, it is believed, has been opened by the drilling in of the Bailey-Cragin No. 1, on the Randolph Permit in Section 33-18-29. This permit, covering approximately 2,650 acres, and filed on at an original cost of $42, is the second parcel of Government land in this area on which production has been obtained. Drilled to a depth of 2,360 feet, the hole was plugged back to 2,296 feet and shot with 200 quarts of glycerin, the top of the sand being 2,230 feet. After drilling out the bridge the well started to make both oil and gas, and, while not in the class with the majority of the producers in the field, the well is expected to pump around 30 bbls. A power has been ordered to the lease and several locations will be made within a few days.

As many geologists believe the production in eastern New Mexico comes from lenticular pools, the bringing in of this wildcat will mean an active drilling program in this immediate vicinity and a thicker and more prolific sand in all probability will be encountered.

Watch Ramage Well

Operators also are watching the A. H. Ramage No. 1 well in Section 31-17-29, this being 4¼ miles east and slightly north of the Ohio-New Sttates producers in the north extension. A sand encountered at 2,550 feet has carried considerable oil and should this be shot it probably would make a small producer. Drilling is now in a pink shale under this sand and the hole will be carried down to around 2,700 feet, in the hope of picking up a second pay.

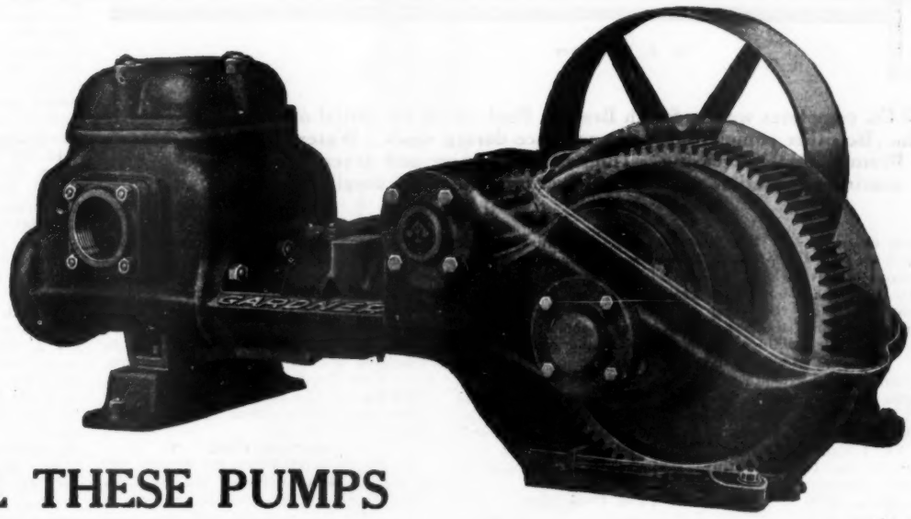
In the productive area a number of good completions were recorded. In Section 4-18-28 the Peublo Oil Co. completed one of the best wells in the field. The second sand was encountered in this test in drilling a pocket under the regular pay at 2,300 feet. No gauge has been taken on this producer, which was shot today with 120 quarts.

In Section 21-18-28, Snowden, McSweeney & McNutt have completed their No. 6, which is flowing at the rate of 350 bbls. Shot with 140 quarts from 2,068-2,099 feet, the well responded immediately and made 150 bbls. in the first hour. Efforts to shoot the top pay encountered in this hole from 1,886-99 feet have been unsuccessful, the shooter being unable to anchor a bridge with the well flowing.

South of this producer the Maljamar Oil & Gas Co. also completed two nice wells in Nos. 9 and 10, the former shot with 70 quarts from 2,023-52 feet has been flowing at the rate of 300 bbls. This is a south offset to No. 7 producer. No. 10 was given a shot of 100 quarts from 2,007-33 feet and appears to be one of the best wells on this lease. The Maljamar now has 10 producers out of 10 tests drilled, with this lease having produced over 110,000 bbls. to date.

Another producer to be brought in is the Flynn, Welch & Yates No. 28, in

(Continued on Page 135)



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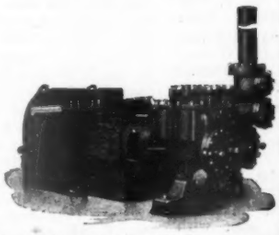

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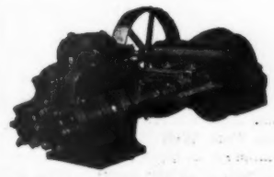

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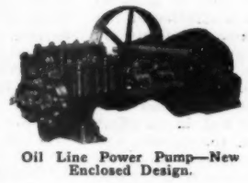

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Oklahoma Field Operations

By J. L. Dwyer

Comar Oil Co. completes well in South Braman Pool which has initial output of 792 bbls. No other completions of importance during week. Water flow in South Braman Pool increasing. Thomas Pool active and several tests there are nearing completion. Garber production holding up despite water.

Last week was the quietest that the oil fields of Oklahoma have seen for some time. There were no completions of importance excepting one well in the South Braman Pool, which the Comar Oil Co. finished and which maintained the production of that pool at a level with former weeks.

The water in the South Braman Pool is increasing and the only wells that are free from this trouble are the Comar Oil Co.'s No. 1 Bechtel, and No. 1 Biddle. With the Herbert Oil Co.'s No. 1 Community, and Shawver and others' No. 1 Townsite, both dead, the entire production of this pool, excepting about 200 bbls., is the property of the Comar Oil Co. A list of the production of the Braman wells follows:

	Bbls.
Comar Oil Co.:	
No. 1 Bechtel	3,505
No. 2 Bechtel	3,227
No. 3 Bechtel	20
No. 4 Bechtel	1,719
No. 1 Biddle	4,878
No. 1 Horne	2,567
No. 2 Horne	1,958
No. 3 Horne	23
No. 1 Johnson	1,184
Herbert Oil Co.:	
No. 2 Community	21
Wentz Oil Co.:	
No. 1 Andrews	116
Total South Braman	19,218

New Braman Pool Well

The new well completed is the Comar Oil Co.'s No. 4 Bechtel, a direct south offset to the No. 1 Biddle. No. 4 Bechtel is located NE cor. NW SE SW, Section 5-28-1w, and had the sand at 2,357-60 feet. It had an initial production of 792 bbls. and is now making the figure recorded above. The owners of the Herbert Oil Co.'s property are of the opinion that the water in No. 1 Community is coming from behind the pipe. They have used the Venetian red test in an effort to locate the source of the trouble, and claim that the red has showed up in the well establishing the origin of the water behind the pipe. This seems to be doubted by the scouts and other oil men of the region who have made a careful study of the situation and believe that the water is coming from the sand. The Wentz Oil Corp. has made two new locations on the Andrews lease offsetting the present well. One location will be drilled to the east and one to the south of the well.

North of the Braman Pool the Marland Oil Co.'s No. 1 School Land, SE cor. SW Section 16-29-1 is swabbing 140 bbls. from sand 2,368-2,457 feet. This may be the forerunner of some good production. The Marland Oil Co. is giving the north end of the State a heavy play as usual, and its efforts are being rewarded. In No. 1, NW cor. NE NE Section 2-27-3w, 4 miles north of the Deer Creek Field, the Oswego lime was topped at 3,820 feet and the well has 1,500,000 feet of gas.

The Thomas Pool, northwest of Tonkawa, in Kay County, is moving along lively and several wells in that field are nearing completion. The Marland Oil Co.'s Thomas lease made 9,120 bbls. for the 24 hours ending Monday morning at 7 o'clock. Of this No. 2 made 3,150 bbls. and No. 4 made 300 bbls. and the remainder of the production was made by No. 1-A, the recently completed well. The wells on all sides of the Thomas Pool are running low and the opinion of many geologists places the location of the fault between the Marland Oil Co.'s No. 2 Thomas and Twin State Oil Co.'s No. 2 Siler, and running in a northeast, southwest line. The well of the Gypsy Oil Co., No. 1, half a mile to the east, looks very discouraging. The 6-inch casing is being underreamed and will be landed at 4,530 feet. The total depth of the hole is 4,540 feet.

In the Garber Field in Garfield County, the water is increasing but the production is holding up well. The ultimate solution of this field will be very interesting. A list of the production of the Garber Field follows:

Garber Field Production

	Bbls.
Roxana Petroleum Corp.	
No. 1-W Schroeder	5,176
No. 2-W Schroeder	10,000
No. 1-W Wolfe	451
Marland Oil Co. & Mid-Continent Petroleum Co.:	
No. 41 School Land	2,104
No. 42 School Land	478
No. 43 School Land	788
No. 45 School Land	5,564
Sinclair Oil & Gas Co.:	
No. 20 Kisner	2,832
No. 21 Kisner	1,000
No. 22 Kisner	2,400
No. 26 Denker	400
No. 20 Walker	412
No. 25 Belveal	1,850
No. 26 Belveal	232
No. 30 Belveal	80
Total Garber deep sand	33,767

Osage County

Atlantic Oil Producing Co.'s No. 1, CSL SW SW SE Section 12-24-8, had the top of the Oswego lime at 2,045 feet and was standing with 1,000 feet of oil in the hole when the rig burned. Tidal-Osage Co. is rigging up No. 11, C NW Section 25-24-8. American Oil & Development Co. has completed No. 20, CSL SW NE Section 13-23-10. Sand was 1,762-1,811 feet and the well is making 15 bbls. after a shot of 120 quarts. Sinclair Oil & Gas Co. has a dry hole in No. 23, CEL NE SE SE Section 32-22-10, which is abandoned at 1,818 feet. Indian Territory Illuminating Oil Co.'s No. 6 CNL NW NE NW Section 1-21-8, is completed for 35 bbls. in sand at 1,205-14 feet.

Skelly & Moore's No. 3, CSL SW SE Section 3-21-9, had the sand at 2,280-2,305 feet and was shot with 20 quarts. It is making 50 bbls. Barnsdall Oil Co.'s No. 7, CNL NE NE Section 10-21-9, had sand at 2,230-75 feet, and is good for 25 bbls. after a shot of 100 quarts. Barnsdall Oil Co. is drilling at 1,300 feet in No. 21, NW cor. SE NE Section 30-21-9. Oklahoma Natural Gas Co. has spudded No. 692, CSL NE SE SW Section 12-21-10. Mid-Kansas Oil Co. has completed No. 2, CSL SW NW Section 11-21-10. Sand was 2,354-66 feet and the well made 65 bbls. on the swab. Tidal-Osage Oil Co.'s No. 1, NW cor. SW Section 11-21-10, had an initial production of 40 bbls. an hour from sand at 2,322-62 feet, and No. 2, CNL NW SW Section 11-21-10, had sand at 2,386-96 feet and made 75 bbls. on the swab. Kanupp and others are fishing for tools at 1,740 feet in No. 3, CEL SE NE Section 18-21-10. Sand Springs Home has spudded No. 88, SW cor. NE NW Section 19-21-10. Breene and others have a good well in No. 14, C S half NW Section 23-21-10, where sand was found at 1,630-86 feet and the well made 74 bbls. Titus and others' No. 3, SW cor. SW Section 15-21-12, had the top of the Burgess sand at 1,530 feet with 2,000,000 feet of gas and a spray of oil. Kewanee Oil & Gas Co.'s No. 5, SE cor. SW Section 19-21-12, had sand at 2,036-42 feet and a total depth of 2,046 feet, where water was found. It was plugged back to 2,042 feet and is good for 6 bbls. Barnsdall Oil Co.'s No. 15, CSL NE NE SE Section 5-20-12, had sand at 1,935-40 feet and pay at 1,970-80 feet, and is completed for 25 bbls. Central Petroleum Co.'s No. 8, SW cor. NW Section 11-20-12, had the Burgess sand at 1,280-1,365 feet with a show of oil and is drilling at 1,506 feet.

Burbank Field

In the Burbank Field, the Prairie Oil & Gas Co. has completed No. 15, CSL SW NE SE Section 12-27-5. Sand was 2,945-3,009 feet and the well was good for 25 bbls. naturally. It was shot with 25 quarts and made 350 bbls. Peters & Oliphant are drilling at 450 feet in No. 4, CNL NW NW NW Section 12-27-6.

The Prairie Oil & Gas Co. is drilling at 600 feet in No. 4, CSL SW SW SW Section 15-26-6. Carter Oil Co.'s No. 7, CSL SE SE NE Section 20-26-6, had sand at 2,925-85 feet and made 550 bbls. on the swab after a shot of 120 quarts, and No. 10, CSL SE SW NE Section 21-26-6, had sand at 2,904-37 feet and swabbed 25 bbls. It will be shot; No. 12, CSL NE NE NE Section 21-26-6, is drilling at 600 feet, and No. 13, CSL SE SE NE Section 21-26-6, is drilling at 500 feet. The rig is up for No. 14, CSL NE SE NE Section 21-26-6. Tidal-Osage Oil Co. has completed No. L, CSL NE NE SE Section 2-27-7. Sand was 2,512-37 feet and the well is pumping 8 bbls. of oil and 15 bbls. of water.

The Prairie Oil & Gas Co. & Comar Oil Co. are drilling below 300 feet in No. 1, SW cor. SE SW SW Section 8-27-6. Osage County: Peters & Oliphant, drilling below 720 feet in No. 3, NE cor. NW NW NW Section 17-27-6; Tidal-Osage Oil Co. drilling below 700 feet in a twin well, No. 21, NE cor. SE NE NW Section 33-22-10; Barnsdall Oil Co. has a machine in for No. 8, NW cor. NE NW NE Section 10-21-9; Clint Moore and others, drilling below 400 feet in No. 4, CWL E half W half SW Section 11-21-9; Devonian Oil Co., fishing for tools at 2,210 feet in No. 1, C NE NE NE Section 25-21-9, an old well drilling deeper. Skelly Oil Co., drilling at 960 feet in No. 1, NE cor. NW SE Section 7-21-11.

The Lewis Oil Co.'s No. 10, SW cor. SE SW SE Section 21-26-6, Osage County, made 200 bbls. the first 24 hours from sand at 2,904-37 feet, shot with 80 quarts. A. D. Morton and the Roxana Petroleum Corp.'s No. 1, C SW NW NW Section 1-26-7, got the top of the lime at 2,464 feet and sandy lime at 2,485-2,503 feet and the hole filled 1,800 feet with oil. Drilling was continued, total depth 2,561 feet. C. J. Wrightsman's No. 1, C SE SE SE Section 24-22-4, was dry and abandoned at 3,800 feet.

Wildhorse District

The Kewanee Oil Co.'s No. 2, NW cor. NE SE NW SE Section 4-22-11, Wildhorse district, found Bartlesville sand at 1,635 feet; first oil at 1,673 feet, pay at 1,727 feet, total depth and stood with 200 feet of oil in the hole awaiting a shot. The Devonian Oil Co. & Marland Refining Co.'s No. 2 SE cor. NE Section 10-21-10, which started off at 90 bbls. a day from sand at 2,082-92 feet, has increased to 452 bbls. a day naturally. It is not completed. The Tidal-Osage Oil Co.'s No. 1, C NW NW SW Section 11-21-10 started at 600 bbls. from sand at 2,322-62 feet but fell off to 390 bbls. It is a completion. Kanupp and others' No. 3, SE cor. NE SE NE Section 18-21-10, was estimated as a 20-bbl. well. Bartlesville sand at 1,935-46 feet, was shot with 60 quarts and the crew was cleaning out. Breene and others in their No. 11, CSL NW Section 5-21-11, is producing 30 bbls. a day naturally from the top of the Mississippi lime, found at 1,966 feet; show of oil at 2,-286-91 feet and at 2,307-11 feet, pay at 2,329-34 feet and water at 2,351 feet. It was plugged back to 2,336 feet.

In the Bird Creek Field, Osage and Tulsa Counties, the Titus and others' No. 3, SW cor. Section 15-21-12, got the Burgess sand at 1,530-49 feet with 2,000,000-foot gas production and a 15-bbl. oil production. It was not completed. No. 4, on the same lease, SW cor. NW SW SW Section 15, was completed in sand at 1,304-59 feet. It was shot with 80 quarts and started off at 40 bbls. with some water. The Kewanee Oil & Gas Co. has started to deepen an old well, No. 5, SE cor. SW Section 19-21-12, which had once been completed at 2,046 feet. The same company's No. 23, SW cor. Section 28-21-12, was abandoned as dry at 2,477 feet. It missed the Wilcox sand.

The Barnsdall Oil Co.'s No. 27, SW cor. SE NE NE Section 31-21-12, got the top of the Wilcox sand at 1,859 feet, a show of oil at 1,875-96 feet, found water at 1,903-06 feet and oil at 1,946-50 feet, and was drilled to 1,954 feet. It looked like a 25-bbl. well, but was not completed. The Pioneer Petroleum Co., in its No. 6-B, NE cor. SE NE SW Section 5-20-11, is good for 20 bbls. after a shot at 1,709-18 feet. Grimes & Gillespie completed a 10-bbl. well in No. 27, SW cor. NW SE NE Section 8-20-12, in sand at 2,168-75 feet, total depth 2,250 feet. It was not shot. The Gled Oil Co. & Grimes' No. 2, NW cor. Section 11-20-12, was abandoned as dry at 2,080 feet. The Continental Oil Co. finished a good well in No. 10, C W half SW NW Section 28-20-12, which started at 300 bbls. a day from Wilcox sand at 1,958-2,034 feet.

Lincoln County

In the Davenport Pool, the Magnolia Petroleum Co. has completed No. 5 Sukavoty, SW cor. SW Section 34-15-5. Sand was 3,392-3,454 feet and the well was shot with 20 quarts and with 50 quarts and is making 12 bbls. No. 4, SW cor. NW Section 2-14-5, is making 450 bbls. from sand at 3,350-3,425 feet. No. 6, NE cor. SW NW Section 2-14-5, had top of sand at 3,393 feet and is drilling in sand at 3,415 feet. It made 845 bbls. the first day. Skelly Oil Co. has a rig on the ground for No. 2 Perkins, SW cor NE Section 214-5. The Texas Co. is rigging up to drill deeper in No. 1 Oleson, NW cor. SW SW Section 2-14-5. The Texas Co.'s No. 3, SW cor. SW Section 2-14-5, had sand at 3,313-82 feet and made 360 bbls. the first 18 hours. It is not completed. Twin State Oil Co.'s No. 4, SE cor. NW NW Section 2-14-5, made 648 bbls. the first day from sand at 3,281-3,372 feet. Southwestern Petroleum Co. & Selby Oil Co.'s No. 7, SE cor. SE Section 3-14-5, had sand at 3,317-98 feet and made 130 bbls. the first 14 hours. J. W. McCullough is drilling below 500 feet in No. 1, C SE SE SW Section 31-12-6.

Okmulgee District

Near Beggs, the Anglo-Texas Oil Co. has a rig up for No. 6, CEL SE SW Section 29-15-11. Olean Petroleum Co. is rigging up No. 4, SE cor. SE Section 11-15-12. Devonian Oil Co. & Independent Oil & Gas Co. have built the rig for No. 8, CSL SW SE Section 7-15-13. Kingwood Oil Co. is building the rig for No. 1, SW cor. SE NE Section 4-13-12.

In the country near the recently completed Wilcox sand well of the Minnehoma Oil Co. there are the following new operations: Gladys-Belle Oil Co. has a rig on the ground for No. 9, SW cor. SE SE Section 13-11-11. Waite

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HORTON

Phillips Co. is rebuilding an old rig to drill deeper in No. 2, SE cor. NW SE Section 13-11-11. Gladys-Belle Oil Co. is rigging up No. 8, CEL SE SE Section 13-11-11. Gladys-Belle Oil Co. has completed a gas well in No. 2, NW cor. SE SE Section 13-11-11, an old well drilled deeper. Sand was 2,816-28 feet and the well completed with 15,000,000 feet of gas. M. C. French has a machine on the ground for No. 3, SE cor. NE NE Section 17-11-12. Empire Gas & Fuel Co. has built the rig for No. 9, NW cor. NE Section 19-11-12. Phillips Petroleum Co. has a dry hole in No. 3, CWL NW SW Section 19-11-12. It is dry and abandoned at 3,520 feet.

The Amerada Petroleum Corp. has a dry hole in No. 1, SE cor. NE SW Section 17-15-11, which is abandoned at 2,680 feet. E. P. Harwell's No. 2, CEL NE NW Section 1-15-12, had the sand at 2,011-14 feet dry, and 2,014-47 feet water. The well was plugged back to sand found at 1,936-45 feet and has a show for a 15-bbl well. Meridian Oil Co. is drilling at 946 feet in No. 2, CNL SW NE Section 1-15-12. Phillips Petroleum Co. has spudded No. 5, SE cor. NW NE Section 1-15-12. Olean Petroleum Co. is drilling at 450 feet in No. 5 Smith, CSL SE NW SE Section 11-15-12. Devonian Oil Co.'s No. 5, CSL SW NE NW Section 14-15-12, is dry and abandoned at 2,623 feet. Paige Brothers' No. 1-A, SW cor. NE Section 14-15-12, is cementing the 6-inch casing at 1,900 feet, where 41,000,000 feet of gas was found at 1,844-1,900 feet. Joe Gardner's No. 1, SE cor. SW NW Section 13-14-12, is dry and abandoned at 2,794 feet. Independent Oil & Gas Co. & Devonian Oil Co. are drilling at 2,210 feet in No. 2, CEL SE SW Section 7-15-13, and No. 7, CSL SW SW SE Section 7-15-13, is completed for an initial production of 850 bbls. after a shot of 9 quarts in sand at 2,668-75 feet.

Southwestern Oilfields Co.'s No. 2, NW cor. NE SE Section 35-15-13, had sand at 1,698-1,749 feet with a 25-bbl. show. It is being cleaned out. Misener and others have completed No. 6, NW cor. SW NW Section 11-15-14, for 75 bbls. in sand at 1,485-96 feet. J. A. Swindler has completed No. 6-A, CEL NE SE Section 20-15-14. Sand was at 2,197-2,203 feet and the well made 300 bbls. naturally. Papoose Oil Co. has completed No. 23, CSL NW SW Section 21-15-14, where was found at 2,174-93 feet and the well started flowing at the rate of 1,400 bbls.; No. 24, NW cor. SW SW Section 21-15-14, is dry and abandoned at 2,215 feet.

In Tiger Flats, the Magnolia Petroleum Co. has completed No. 2, C SW NW Section 4-12-12. Sand was 1,890-1,915 feet and the well is doing 10 bbls. after a shot of 80 quarts.

Near Morris, E. J. Lambert is drilling at 500 feet in No. 4, NE cor. NE Section 12-13-14. Utah Oil Co. has completed No. 1, SW cor. NE Section 15-13-14, where sand was 2,429-68 feet and the well made 80 bbls. on the pump. Iron Mountain Oil Co. has completed No. 9, CWL SE NW Section 24-13-14. W. R. Summerville has a dry hole at 2,060 feet in No. 3-A, CSL SW NW Section 25-13-14.

Near the Deaner Pool, the Windsor Oil Co. has spudded No. 1, NW cor. NW Section 23-11-11. Decises and others have completed No. 3, NE cor. SE NE Section 17-11-12. Sand was 2,436-42 feet and the well is shut in with 20,000,000 feet of gas. Kingwood Oil Co.'s No. 3, CSL NE SE Section 25-12-13, is dry and abandoned at 3,175 feet. Olean Petroleum Co. has built the rig for No. 7 Hogan, CEL SW NW Section 14-15-12.

McIntosh County

Over in northwestern McIntosh County, Travis & Douglas have a rig up for a test on the McDermott farm, NE cor. Section 1-12-17.

The Transcontinental Oil Co.'s No. 2 Phillips, NE cor. Section 9-15-11, was drilling below 485 feet. Summers and others have a machine in for No. 1 Roe, SE cor. NE NE Section 10-15-14, Ball Hill Field.

The Eagle Picher Oil Co. has a rig on the ground for No. 2 Larney, C NE SE SE Section 32-13-12. The Morton Petroleum Co. was drilling below 450 feet in No. 5 Tiger CSL SW NE Section 7-12-12, and the Wooster Oil Co. has commenced drilling No. 7 Haggert, NW cor. SW NE Section 35-12-12. In the Morris district the Iron Mountain Oil Co. is rigged up on No. 14 Johnson, NE cor. SW Section 24-13-14, and W. R. Summerville has a rig on the ground for No. 15 Stetson, NW cor. SW SW NW Section 25-13-14.

The Magnolia Petroleum Co. has a rig up for a twin well, No. 7 Thomas, NE cor. NW Section 1-11-13, and is drilling below 625 feet in No. 4-A Thomas, C SW NE NW Section 1. E. P. Jones completed a failure in No. 1 Warden, SW cor. NE Section 6-11-13. It was dry and abandoned at 3,255 feet. Weir and others have a machine on the ground for No. 2 Hawkins, CWL NW SE Section 4-11-12.

Okfuskee County

Tidal-Osage Oil Co. No. 2, SW cor. SW Section 34-10-11, had sand at 2,550 55 feet with 10,000,000 feet of gas and is drilling ahead. Josey Oil Co. & Margay Oil Co.'s No. 4, SW cor. SE NW Section 1-9-9, had sand at 3,360-80 feet with 800 feet of oil in the hole. It will be drilled deeper. Phillips Petroleum Co. has spudded No. 8, NE cor. SE SE Section 3-9-9. T. B. Slick has a dry hole at 3,333 feet in No. 8-A, SE cor. NE SW Section 3-9-9. T. B. Slick's No. 11, NW cor. SW SE Section 3-9-9, is dry and abandoned at 3,335 feet.

Burke-Greis Oil Co.'s No. 3, NE cor. SW SW Section 15-10-9, had sand at 2,900-3,005 feet and is drilling in shale at 3,008 feet. It is making 90 bbls. a day and is not completed. Arkansas Fuel Co.'s No. 1-A, CSL SE SE NE Section 33-10-9, had sand at 3,059-86 feet and an initial production of 235 bbls.

In Township 11-11, the Blakeley Oil & Gas Co. has started drilling No. 3, SE cor. SW NW NE Section 10-11-11. Rigs are up for the Independent Oil & Gas Co.'s No. 15 Holmes, C NE SW SE Section 13; Minnehoma Oil Co.'s No. 5-W Fields, SE cor. NE NE Section 24, both of which will be Wilcox sand tests and the Lyons Petroleum Co.'s No. 4-W P. Fields, C NE NW NE Section 24.

Hughes County

Tidal-Osage Oil Co. is building the rig for No. 4, NW cor. SW NW Section 3-9-11; and also for No. 5, SE cor. NW NW Section 3-9-11. No. 1, SW cor. NW NW Section 3-9-11, had sand at 2,921-25 feet and the well made 196 bbls. naturally. It will be shot. Tidal-Osage Oil Co.'s No. 3, CWL NW SE NE Section 4-9-11, had sand at 2,874-2,916 feet and made 400 bbls. naturally. The rig is being built for No. 4, NE cor. SE NE Section 4-9-11.

In the Holdenville Pool, the Independent Oil & Gas Co. has completed No. 1, SE cor. NW Section 35-8-8. Sand was 3,237-70 feet and the well is making 2,000,000 feet of gas and 70 bbls. of oil. Independent Oil & Gas Co. has also completed No. 3, NE cor. SE NW Section 35-8-8, where sand was 3,198 3.254 feet and the well is shut in with 38,000,000 feet of gas; No. 4, NW cor. SE SW Section 35-8-8, is also completed with 33,000,000 feet of gas in sand at 3,212-27 feet. J. W. McCullough's No. 1-A, NW cor. NE SW Section 35-8-8, is completed for 40,000,000 feet of gas and 30 bbls. of oil in sand at 3,222-70 feet. Roxana Petroleum Corp.'s No. 2 SW cor. NE NW Section 35-8-8, had the sand at 3,195-3,223 feet and is shut in and shut down with 30,000,000 feet of gas. It is not completed.

In the Yeager Pool, E. L. Robinson's No. 1, SW cor. NW Section 17-8-10, had the sand at 3,046-85 feet with 30,000,000 feet of gas and no oil. Dixie Oil Co.'s No. 2, NE cor. SE Section 18-8-10, had sand at 2,686-98 feet with 20,000,000 feet of gas and no oil. It is shut down and not completed, and No. 2, NE cor. SE NE Section 18-8-10, is swabbing 200 bbls. from sand at 2,777-93 feet and is not completed. Independent Oil & Gas Co. and others' No. 1, SW cor. SE SE Section 18-8-10, is making 260 bbls. a day from sand at 2,700 feet. The well was dry and the casing was being pulled when the oil was found. The Carter Oil Co. is drilling an old well deeper in No. 3 Alexander, NE cor. NE Section 19-8-10. Present depth is 1,620 feet.

Roxana Petroleum Corp.'s No. 1, SW cor. NW Section 28-7-8, had sand at 3,110-53 feet and is flowing by heads approximately 10 bbls. an hour. The tanks are being erected before the well will be drilled in.

Josey Oil Co. & Margay Oil Co.'s No. 4, CSL SW SE NW Section 1-9-9, had sand at 3,360-90 feet and the well did 400 bbls. naturally. Harris-Hayes Co. and others have a dry hole at 3,350 feet in No. 1, SW cor. SE SE Section 13-9-9.

Cromwell Pool

Goodner Petroleum Co. has a dry hole in No. 1, NE cor. NW SW Section 14-11-8, which is abandoned at 2,750 feet. Southwestern Petroleum Co.'s No. 3, CSL SW SE NW Section 14-11-8, had the lime at 3,955-62 feet and is drilling at 3,977 feet. It is estimated at 10 bbls. a day. Continental Oil Co. has a rig on the ground for No. 2, CSL SE SW Section 28-11-8. Southwestern Petroleum Co. has a dry hole in No. 1, SW cor. NE SE Section 28-11-8. It is abandoned at 3,295 feet. Phillips Petroleum Co.'s No. 1, SE cor. SW Section 32-11-8, had the top of the sand at 3,443 feet and is drilling at 3,469 feet. It is estimated at 100 bbls. Carter Oil Co. and others' No. 6, SE cor. NW Section 33-11-8, had sand at 3,382-3,440 feet and did 444 bbls. after a shot of 20 quarts. Sinclair Oil & Gas Co. and Houston Oil Co.'s No. 5, NE cor. NW NE Section 33-11-8, had sand at 3,436-49 feet and is swabbing 220 bbls. Magnolia Petroleum Co.'s No. 8, SW cor. SE NE Section 5-10-8, had sand at 3,418-27 feet and is flowing 7 bbls. an hour after a shot of 7 quarts. Prairie Oil & Gas Co. has a failure at 3,474 feet in No. 1, SE cor. SW NE Section 8-10-8. Mid-Continent Petroleum Corp. and others' No. 5, SW cor. SE SE Section 15-10-8, had sand at 3,108-39 feet and is being cleaned out after a shot of 20 quarts. Atlantic Oil Producing Co. has a rig on the ground for No. 1 Bleeker, SW cor. SW Section 31-10-8. The Sinclair Oil & Gas Co. and Houston Oil Co. have a dry hole in No. 6, SE cor. SW SE Section 28-11-8. It is abandoned at 3,575 feet.

Seminole County

Indian Territory Illuminating Oil Co. has spudded No. 1, NW cor. SE Section 24-9-6. Independent Oil & Gas Co. and others' No. 1, SE cor. NE NE Section 7-9-8, is owing at the rate of 150 bbls. a day from sand at 3,277-99 feet. Berry Petroleum Co.'s No. 1, SW cor. NW NW Section 8-9-8, had sand at 3,284-3,323 feet with 500 feet of oil in the hole and is shut down for orders. McCullough and others have spudded No. 1, SE cor. SW NE Section 27-8-8. Magnolia Petroleum Co. is drilling at 850 feet in No. 3, SW cor. SW Section 32-8-8.

The Texas Co. has a showing for a well in No. 1, NE cor. SW Section 15-8-7, where sand was found at 3,248-60 feet. It is estimated at 20 bbls. on the pump and is not completed.

Creek County

Atlantic Oil Producing Co. has spudded No. 2, NW cor. SE NW Section 3-15-7. Pulaski Oil Co. has completed No. 7, SW cor. NE Section 8-15-8. The well is making 100 bbls. after a shot of 160 quarts in sand at 3,719-83 feet. The Texas Co.'s No. 2, NE cor. SW SW Section 23-15-8, had the sand at 2,432-86 feet and was shot with 80 quarts two months ago. It is still pumping 5 bbls. and is not completed. C. G. Tibbens has a light well in No. 1-A, NW cor. SE Section 25-15-8, where sand was found at 2,447-56 feet and the well is doing 20 bbls. after a shot of 80 quarts. Empire Gas & Fuel Co. has built the rig for No. 2, Benjamin, NW cor. SW NW Section 30-15-8. C. G. Tibbens' No. 4, SE cor. NW NW Section 13-14-8, is good for 45 bbls. after a shot of 100 quarts in sand at 2,409-52 feet, and the rig is up for No. 8 Sewell, NW cor. SW NW Section 13-14-8; the timbers are on the ground for No. 9 Sewell, NE cor. SE NW Section 13-14-8.

Frank Billingslea and others' No. 1, SW cor. NW Section 7-18-9, had sand

(Continued on Page 126)

Kansas Oil Field News

By J. L. Dwyer

Kansas offered very little news last week. With the exception of Greenwood County, where the unusually large number of operations continue to boost the daily production of the county, there were few completions.

The daily production of Rainbow Bend Pools is slipping and stands at 8,682 bbls.

In Butler County, Mason & Ralston's No. 1 Shenrock, NE cor. SE SW Section 32-26-6 had the sand 2,776-82 feet and is estimated at 75 bbls., and will be shot.

An important completion in Woodson County is Burford & Brimm's No. 1 Daniels NE cor. SW Section 13-26-14. This well had the sand 2,100-02 feet, and is completed for 6,000,000 feet of gas. This is thought to be the squirrel sand.

The recent rains have filled up the ponds, and have permitted the resumption of drilling activities once more. There were about 100 wells shut down for water before the storm.

Greenwood County

The Empire Gas & Fuel Co. is spudded and shut down in No. 3-A CSL SE SW SE Section 24-23-8. Mid-Continent Petroleum Corp. is drilling at 1,125 feet in No. 4 CSL NW SW SW Section 18-22-11. Phillips Petroleum Co.'s No. 1 NW cor. NE Section 30-22-11, had sand at 2,053-2,108 feet and is completed for 200 bbls. after a shot of 140 quarts.

Roth Faurot and the Mission Oil Co.'s No. 1 NE cor. NE Section 16-23-10, had sand at 2,148-65 feet with first oil at 2,156 feet. This is a stray sand and the well will be deepened. Mid-Kansas Oil Co. is drilling at 539 feet in No. 26 Allen, SW cor. NE NE Section 23-23-10, and No. 31, NE cor. SE SE Section 31-23-10, had sand at 2,263-2,310 feet, and is good for 165 bbls. after a shot of 200 quarts; No. 32 NE cor. NE Section 31-23-10, had the sand at 2,296-2,355 feet and was shot with 60 quarts and is being cleaned out.

Empire Gas & Fuel Co.'s No. 6, CSL SW NW SE Section 11-22-11, swabbed 57 bbls. in 18 hours from sand at 1,820-93 feet, and No. 1 NW cor. SE Section 14-22-11, is dry and abandoned at 2,601 feet. White Eagle Oil Co. is drilling at 1,247 feet in No. 1 SW cor. NW Section 9-23-11. Braden Brothers' No. 4, C S half S half NE Section 27-22-13, had sand at 1,819-59 feet with 300 feet of oil in the hole and is not completed. Polhamus and others are shut down at 400 feet in No. 2 CSL SE NE NE Section 27-24-9. Roth Faurot is shut down at 1,325 feet in No. 1 NE cor. SE NE Section 11-25-8. National Oil & Refining Co. is drilling at 1,350 feet in No. 2 NE cor. SW SW Section 3-25-9. Couzans & Parker have the rig and tools in for No. 1 Wallace NW cor. SE Section 10-25-9. Mid-Kansas Oil Co. has built the rig for No. 3 Ladd, NE cor. SW NE Section 19-25-9, and the rig is being built for No. 5 Ladd, SE cor. NW NW Secttion 10-25-9; No. 7, SW cor. NE SW Section 30-25-9, had sand at 2,404-60 feet and is doing 100 bbls. after a shot of 100 quarts. Skelly Oil Co. is shut down at 1,187 feet in No. 4-A Fleming CNL NE SE Section 15-24-12. R. T. Parkins and others have a dry hole in No. 1 NW cor. SW Section 20-25-11. It is abandoned at 2,075 feet. Flint Ridge has completed No. 1 CEL SE NE Sec-

(Continued on Page 122)

BACKING UP THE FIELD PLAY

WHEN *the* SERVICE *of* SUPPLY FAILED

Back from Moscow they came—this broken band of starving, plague-stricken men—pitiful remnant of the proud army of Napoleon, once a host of conquering invaders, now staggering back, conquered without having been in a battle—beaten by a failure of supplies because the Little Corporal neglected, in his lust for conquest, his own truthful observation "an army moves on its belly."

No such catastrophe can happen to the army of Petroleum while the INTERNATIONAL SUPPLY COMPANY remains constantly on the alert, ready to satisfy every need, to fill every want arising in the great business of producing and refining oil.

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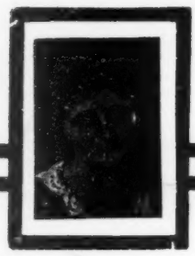


North Louisiana-Arkansas

By M. L. Vaughn

Arkansas increases 692 bbls. while North Louisiana declines 807 bbls., net decrease in both States of 115 bbls. Lafayette County again disappointed by salt water. Harrison County, Texas, gas field in line for development. Monroe gas field has printers' ink plant. Jackson Parish wildcat attracts attention.

SHREVEPORT, La., Sept. 21. — The Arkansas Field made a desperate attempt to hold its own last week and exceeded expectations by registering an increase of 692 bbls. a day. This was more than offset by a decrease of 807 bbls. a day in Louisiana, leaving an average decrease from the combined fields of 115 bbls. a day. Cotton Valley fell from 11,360 to 10,685 bbls., with other districts in North Louisiana showing but slight variations. Smackover heavy showed an increase of 885 bbls., offset by a decline of 265 bbls. in Smackover heavy. Total production from the combined fields averaged 266,642 bbls. a day, distributed as follows:

North Louisiana	
Bellevue	2,910
Caddo light	8,990
Caddo heavy	1,955
Cotton Valley	10,685
De Soto and Red River	4,085
Elm Grove	525
Haynesville	12,410
Homer	6,265
Arkansas	
Smackover heavy	181,590
Smackover light	25,210
El Dorado	8,805
Nevada County	1,390
Stephens	1,822
Total	218,817
Total both fields	266,642
Decrease	115

Lafayette Disappointment

Lafayette County, Arkansas, has held the attention of operators during the past week and excitement ran high for a few days when the Arkansas Fuel Oil Co. had a showing of oil at 2,783 feet in a test on the Allen lease in Section 18-19-24, 2 miles east of Bradley and 4 miles north of the Louisiana line and Bossier Parish. Lease values jumped as high as $50 an acre around the new well, but all hopes were dashed when it finally tested salt water, repeating the experience of a number of promising tests in this territory.

Organization of the Tylong Oil & Gas Co. with a capitalization of $120,000, represented by leases in Harrison County, Texas, indicates immediate development for gas in that territory. The leases lie in the neighborhood of the Waskom gas field, and the personnel of the new company is identical with that of the National Gasoline Co., which is building a gas line from the Waskom Field to Tyler, Tex. Officers of the company are: President, E. R. Ratcliff; vice president and treasurer, W. R. Spann, and secretary, Ernest L. Blue. Work on the main gas line is progressing rapidly, with prospects that natural gas will be supplied to the city of Tyler by the middle of November, and a large force of men are at work in Tyler laying mains throughout the city.

The third filling station of the C. & G. Oil & Gas Co. has been opened in Shreveport. The station is near one of the best residential districts and in the heart of one of the new wholesale and business districts developing in the outskirts, and will handle Standard Oil Co. products only.

G. A. Humason, of Houston, Tex., is now in Shreveport arranging for a demonstration of his latest invention, known as the Humason device, and intended to overcome the sanding up of producing oil wells. Mr. Humason says. "The invention consists of a packer standing valve and working barrel and water valve which is connected just above the working barrel, and a casinghead which is to be placed at the top of the well. By attaching the casinghead to a water valve and pouring in hot water while pumping out the oil, production of the wells can be greatly increased."

The device will be on display at the Republic Supply Co.'s warehouse in Shreveport for several days, and practical demonstrations will be made in the Caddo Field this week.

Making Printers' 'Ink

For the first time in the history of the Monroe gas field, printers' ink, made from carbon black, is being turned out as finished product in Louisiana territory. A consignment of 100 bbls. of this product was shipped by barge down the Ouachita River to New Orleans last week. Since the early days of the field, one of the largest ink producers in the country has operated a carbon plant at Fairbanks, but it is only recently that it has started manufacturing the finished product in Louisiana.

Geologists are particularly interested in a core taken from a wildcat test in Jackson Parish, which contains fossils, shell and gravel, apparently in the Blossom sand at the unusual depth of 3,500 feet. The well is being drilled by the El Dorado Chief Oil & Gas Co., of New Orleans, and is on the J. H. Rhymes lease in Section 13-14-4, 3 miles south of Jonesboro. A block of 11,000 acres was leased in this vicinity by James D. Houseman, of Homer, La., about half of which was taken over by the New Orleans interests for exploration purposes. Drilling is being continued cautiously, with frequent corings being taken, and the well is now down 3,515 feet.

Completions—Union County, Arkansas

Dearth of activity in the Smackover Field resulted in the completion of only 12 wells in the Union County area during the past week, of which two were failures and 10 producing wells adding 2,600 bbls. to the output of the field.

Amerada Petroleum Co. completed No. 10 Lyell, Section 3-16-15, pumping 120 bbls. at 2,567 feet.

Arkansas Fuel Oil Co.'s No. 7 Ferguson, Section 6-16-15, made a 60-bbl. pumper at 2,564 feet.

Clark & Melat abandoned No. A-3 Wells, Section 15-16-15, at 2,453 feet.

Daniels & Rowe completed No. 5 Tatum, Section 7-16-15, flowing 300 bbls. at 2,612 feet.

Lion Oil & Refining Co.'s No. G-3 Murphy, Section 8-16-15, made a 450-bbl. pumper at 2,511 feet.

Magnolia Petroleum Co. completed No. 3 Stout Lumber Co., Section 1-16-17, pumping 15 bbls. at 2,264 feet.

Moco Oil Corp. completed No. 4 Flenniken, Section 4-16-15, pumping 150 bbls. at 2,377 feet.

Natural Gas & Petroleum Co.'s No. D-4 Murphy, Section 8-16-15, is pumping 500 bbls. at 2,407 feet.

Riggs Drilling Co. got salt water in No. 1 Wingfield, Section 5-16-15, and the well was abandoned at 2,370 feet.

Jim Stock's No. 1 Polk-Ezell, Section 18-17-14, is pumping 125 bbls. at 2,869 feet.

Ouachita County

Completions in the north end of the Smackover Field, in Ouachita County, numbered 16, with 4 failures and 12 producers having an aggregate initial production of 6,032 bbls. The biggest producer of the month was completed by the Standard Oil Co., its No. B-7 Umsted, Section 32-15-15, flowing 2,500 bbls. a day at 2,422 feet.

Atlantic Oil Producing Co. completed No. 5 Berg, Section 30-15-15 pumping 250 bbls. at 2,608 feet.

J. E. Crosbie completed No. 14 Berry, Section 33-15-15, swabbing 500 bbls. at 2,375 feet.

Grayson and others completed No. 2 Williams, Section 4-16-15, pumping 140 bbls. at 2,382 feet.

Houston Oil Co.'s No. 5 Reynolds, Section 27-15-15, was drilled to 2,849 feet and abandoned at this depth.

Invaders Oil Co. abandoned No. 1 Hill, Section 5-16-15, junked at 2,005 feet.

E. M. Jones struck salt water in No. 1 Wilson, Section 26-15-18, and the test was abandoned at 2,510 feet.

Magnolia Petroleum Co. completed No. 7 J. Goodwin, Section 5-16-15, flowing 800 bbls. at 2,559 feet, and No. 8, same section, pumping 235 bbls. at 2,373 feet.

Phillips Petroleum Co. completed No. 8 Joyce, Section 33-15-15, pumping 150 bbls. at 2,380 feet.

Roxana Petroleum Corp. completed No. 1 Avera, Section 35-15-15, pumping 250 bbls. at 2,557 feet.

Simms Oil Co. completed No. 8 Harsch, Section 31-15-15, flowing 200 bbls. at 2,594 feet, and No. 8 Reynolds, Section 32-15-15, pumping 500 bbls. at 2,397 feet.

Stephens District

Buffalo Oil Co. completed No. 1 Davis, Section 22-15-19, pumping 7 bbls. at 2,221 feet.

Humble Oil & Refining Co. abandoned No. 1 Warren, Section 35-13-19 at 1,350 feet.

Caddo Parish

In the Hosston district, the Dixie Oil Co. completed No. 2 J. M. Hoss, Section 24-22-15, pumping 50 bbls. at 1,075 feet.

The Texas Co. tested dry and abandoned No. 5 Huron Land Co., Section 17-15-12, south of the Elm Grove gas field.

La Salle Parish

In the Urania district, the Gould-Monroe Drilling Co. got salt water at 1,496 feet in No. 1 Sydney Harper, Section 23-10-2e, and the test was abandoned.

Love and others got salt water in No. 2 Tremont Lumber Co., Section 30-10-2e and the test was abandoned at 1,534 feet.

Urania Petroleum Co.s' No. 8 Urania, Section 19-10-2e, is flowing 20 bbls. a day at 1,579 feet, 10 per cent salt water.

Ouachita Parish

Natural Gas & Producing Co. completed No. 1 Johnson. Section 52-20-4e, making 13,000,000 feet of gas at 2,163 feet.

Sabine Parish

Toro Petroleum Co. abandoned No. 1 Wyatt Lumber Co., Section 18-4-11, testing dry at 2,235 feet.

Columbia County, Arkansas

Gulf Refining Co. drilled to 3,459 feet in a deep test on the J. D. Hines lease, Section 17-17-18, and the test was abandoned in red gumbo.

Lafayette County, Arkansas

Humble Oil & Refining Co. abandoned No. 1 Bodcau-Waldorf, Section 15-15-22, at 1,350 feet.

Miller County

Humble Oil & Refining Co. tested dry and abandoned No. 1 Dorsey, Section 2-17-26 at 1,395 feet.

Nevada County

Autrey Oil Co. completed No. 2 McKinney, Section 10-14-21, pumping 50 bbls. at 1,200 feet, and No. 3 same section, pumping 65 bbls. at 1,227 feet.

Drilling Operations

Union County, Arkansas

Drilling activity in the Smackover Field remains practically unchanged, with an average of 200 new wells drilling and very little new work being started. Salt water and spectacular gas blowouts still menace successful development to the

ONLY BIG WELL OF THE WEEK IN SMACKOVER IS IN GRAVES SAND

By Special Correspondent

EL DORADO, Ark., Sept. 19.—The best well of the week in the Smackover Field was the Humble Oil & Refining Co.'s No. 7 Hildebrand, SW SE SW Section 28-15-15, which was completed in the Graves sand at 2,431-36 feet and started off at 3,000 bbls. a day.

Hickman and others' No. 11 Graves, SE NW SE Section 3-16-15 is a 480-bbl. well at 2,526-53 feet. The Standard Oil Co. of Louisiana got a 40,000,000-foot gas well out of No. 30 Hardy Murphy, C NW NW SW Section 4-16-15, in sand at 2,515-34 feet. The Moco Oil Corp.'s No. 4 Flenniken, CWL N half SE SW Section 5-16-15, is good for 150 bbls. at 2,365-77 feet. The Lion Oil Refining Co.'s No. A-8 Murphy, NW NE SE, Section 7-16-15 is flowing by heads 75 bbls. a day from sand at 2,629-75 feet. The Pure Oil Co.'s No. B-3 Murphy, CSL NE NE Section 8-16-15 started off at 210 bbls. at 2,430-40 feet. The Lion Oil & Refining Co.'s No. G-3 Murphy, SW NE SE Section 8-16-15 started at 400 bbls. of fluid, 70 per cent salt water from sand at 2,499-2,511 feet. The Natural Gas & Fuel Corp.'s No. 5 Billyew, C NW NW Section 9-16-15 was completed as a 25,000,00-foot gasser at 2,525-35 feet. The Roxana Petroleum Corp.'s No. A-1 Flenniken, NW SE Section 10-16-15 is a very small well with salt water from sand at 2,581-87 feet. A. H. Ramage tested dry at 2,582-92 feet in No. C-9 Lawton, NW SW NW Section 10-16-15. R. A. Bristol, trustee's No. 1 Parkinson, NE cor. Lot 8 Section 1-16-16 got sand at 2,571-74 feet and the well flowed 260 bbls. 9 per cent salt water, the first day. Leon and others' No. 2 Caruth, NE SW NW Section 7-16-16, is a 20-bbl. well at 2,315-23 feet. The Simms Oil Co.'s No. 5 Nannie Murphy, SW SE SE Section 29-15-15 started at 1,000 bbls., 15 per cent salt water from sand at 2,586-2,600 feet. The Sun Oil Co. tested dry at 2,612-15 feet in No. 6 Johnson, SW SE SE Section 30-15-15. C. F. Colcord's No. A-3 Laney, SE SW Section 31-15-15 is a 250-bbl. well at 2,587-94 feet. The Simms Oil Co.'s No. 5 Reynolds, NW NE NE Section 32-15-15 got sand at 2,388 93 feet and the well flowed 250 bbls. 26 per cent salt water. The Standard Oil Co. of Louisiana's No. 5 Powell, NW SE NW Section 34-15-15 got sand at 2,578-98 feet. The well started at 3,000 bbls. of oil, 40,000,000 feet of gas and 100 bbls. of salt water. Wilroy and others are shooting casing to abandon No. 1 Berg, SE NE Section 28-15-15, total depth 2,568 feet.

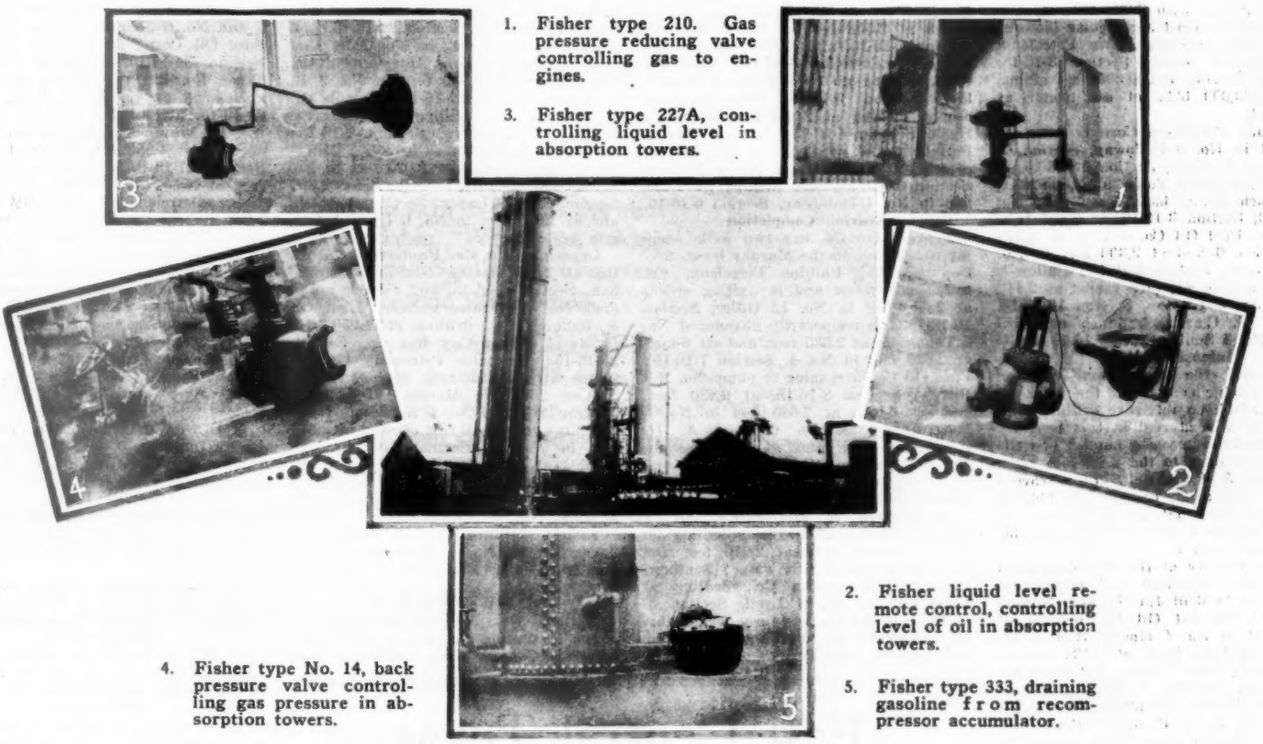
In LaFayette County the Arkansas Fuel Co.'s No. 1 Allen, SE cor. SE SW Section 18-19-24 set 6⅝-inch casing at 2,780 feet and tested salt water and a

(Continued on Page 120)

J. A. Hull Co.

[KANSAS GASOLINE CO., WINFIELD, KANSAS]

new gasoline plant is FISHER EQUIPPED



1. Fisher type 210. Gas pressure reducing valve controlling gas to engines.

3. Fisher type 227A, controlling liquid level in absorption towers.

2. Fisher liquid level remote control, controlling level of oil in absorption towers.

4. Fisher type No. 14, back pressure valve controlling gas pressure in absorption towers.

5. Fisher type 333, draining gasoline from recompressor accumulator.

When J. A. Hull Company built their new gasoline plant at Winfield, Kansas, Fisher equipment was used throughout.

Just another instance of the tendency of users of this type of equipment to standardize on Fisher — a line that has grown consistently in favor until it is recognized the world over as standard equipment.

THE FISHER GOVERNOR COMPANY
MARSHALLTOWN, IOWA

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deep sand throughout the field but the search to the lower pay is being continued with the hope that these difficulties may diminish or be overcome.

Among the wells in the Union County area whose final outcome is in doubt, owing to gas blowouts and salt water conditions, the Amerada Petroleum Corp. No. 6 Calloway, Section 4-16-15, tested 25,000,000 feet of dry gas at 2,582 feet and has been shut in until future action is decided upon; Hollifield and others tested salt water at 2,611 feet; drilled to 2,673 feet and are setting 4-inch for another test; Humble Oil & Refining Co.'s No. A-4 Lawton, Section 7-16-15, tested salt water at 2,683 feet and has been temporarily abandoned; Imperial Oil & Gas Co.'s No. 9 Murphy, Section 9-16-15, blew in at 2,641 feet, making 45,000,000 feet of gas with a spray of salt water and is shut in, waiting orders; Mazda Oil Co.'s No. R-4 Lawton, Section 10-16-15, blew in making 20,000,000 feet of gas and 5,000 barels of salt water at 2,735 feet and they are arranging to plug back for a shallower test; The Texas Co.'s No. 11 Graves, Section 3-16-15, had a blowout at 2,529 feet, making 25,000,000 feet of gas with 3,000 bbls. of salt water, and the most spectacular blowout of the week was the Unity Petroleum Co.'s No. 14 Roper, Section 3-16-15, which is blowing 40,000,000 feet of gas and 10,000,000 bbls. of salt water at 2,541 feet.

Amerada Petroleum Corp is down 2,604 feet in No. 6 Calloway, Section 4-16-15, No. 5 Giller, Section 15-16-15, is temporarily closed down at 2,565 feet, and 6-inch casing has been set in No. 11 Lyell, Section 3-16-15, at 2,354 feet. Arkansas Fuel Oil Co. drilling at 2,375 feet in No. 9 and at 2,300 feet in No. 10 Ferguson, Section 6-16-15; Bailey & Trimble setting 4½-inch casing at 2,442 feet in No. 5 Lawton, Section 10-16-15, and J. W. Clark set 6-inch at 2,615 feet in No. 3 Smith, Section 16-16-15.

Intensive Drilling

Following the completion of Jim Stock's producing well in the East El Dorado Field, an intensive drilling campaign has been started in this territory and a steadily increasing number of wells are being started to the 2,800-foot sand. The Polk & Ezell well, the discovery well in this sand, gauged 125 bbls. a day when first put on the beam, but has declined to 75 bbls. with considerable salt water and b. s.

In the vicinity of the new deep sand development, Braswell and others are rigging up to drill No. 1 Doss, Section 16-17-15; Clement Oil Co. drilling at 1,500 feet in No. 4 Moody, Section 18-17-14, and Sam Cook at 2,100 feet in No. 1 Ezell, same section; Pat Marr has derrick up for No. 1 Graves, Section 17-17-14; Norris and others are rigging up to drill No. 1 Perdue, Section 4-17-14; Ohio Oil Co. down 1,000 feet in No. 1 Murphy, Section 24-17-15; Russell and others drilling at 850 feet in No. 1 Brown, Section 8-17-14; Wingfield and others set 10-inch at 100 feet in No. 1 Tuffs' Section 18-17-14, and Zoder and others down 2,160 feet in No. 5 Allen, Section 18-17-14; Clark & Greer are drilling at 2,500 feet in No. 1 Roseboom, Section 7-17-14, and interest is centered on this well as the next test for the deep sand production.

Crawford & Sebastian are about ready to test No. 6 Giller, Section 14-16-15, and No. 4 Graves, Section 3-16-15, in the 2,600-foot sand; Custer & Nash drilling at 1,200 feet in No. 1 Primm, Section 1-16-16; Eason and others, arranging to test No. 6 Palmer, Section 9-16-15, in the Blossom sand, and bailing casing at 2,482 feet in No. 5 Murphy, Section 15-16-15; W. H. Gilliland set 6-inch casing at 2,255 feet in No. 2 Rice, Section 7-16-16, and Fitzwater and others set 6-inch at 1,978 feet in No. 1 Saxon, Section 16-16-16.

Gulf Operations

Gulf Refining Co. has two wells nearing completion on the M. Alphin lease, Section 2-16-15, arranging to pump No. 2 Fagg, Section 7-16-15 at 2,350 feet, drilling at 1,950 feet in No. 1 McMullen, Section 1-16-16, and bailing to test 32 feet of sand at 2,265 feet in No. 41 Werner Saw Mill, Section 6-16-16.

Doern and others are temporarily closed down at 2,697 feet in No. 1 Fletcher, Section 4-19-16, 4 miles west of the south end of the El Dorado Field.

F. C. Henderson has plugged back to 2,736 feet in his deep test drilled to 3,079 feet on the Smith lease, Section 18-16-15.

Hickman and others arranging to test at 2,520 feet in No. 10 Graves, Section 3-16-15; Higgins Oil & Fuel Co., arranging to pump No. 40 McGraw, Section 7-16-16, standing with 1,200 feet of oil in the hole at 2,300 feet; Imperial Oil & Gas Co., drilling No. 11 McClannahan, Section 9-16-15, at 650 feet, and abandoned No. 12, same section, at 350 feet; E. M. Jones set 10-inch at 457 feet in No. 1 Lawton, Section 10-16-15; Keene & Woolf, coring at 2,500 feet in No. 4 Murphy, Section 9-16-15; Laurel Oil & Gas Co., bailing to test 9 feet of sand at 2,638 feet in No. A-8 Murphy, Section 7-16-15; drilling at 3,030 feet in No. A-10, Section 8-16-15; at 2,760 feet in No. B-2, same section, and set 6-inch at 2,393 feet in No. A-4 Hardy-Murphy, Section 9-16-15.

J. S. Lyell has four wells nearing completion on fee land in Section 3-16-15; Magnolia Petroleum Co., setting 6-inch at 2,558 feet in No. 6 Hatfield, Section 7-16-15, and derrick up for No. 2 Hossiter, Section 8-16-16; Moco Oil Corp., rigging up to drill No. 5 Flenniken, Section 5-16-15; Murdock and others, drilling at 2,365 feet in No. 4 Hays, Section 4-16-15; Natural Gas & Petroleum Co., arranging to test 14 feet of sand at 2,590 feet in No. 4 Ballard, Section 15-16-15, and drilling at 2,275 feet in No. 1 Holloway, Section 6-16-16.

Nearing Completion

Penguin Oil Co. has two wells nearing completion on the Murphy lease, Section 8-16-15; Phillips Petroleum Co. tested salt water and is waiting orders at 2,696 feet in No. 12 Giller, Section 10-16-15, has temporarily abandoned No. 2 Thompson at 2,535 feet, and set 6-inch at 2,630 feet in No. 4, Section 7-16-15; Pure Oil Co., arranging to pump No. B-3 Bilyew, Section 8-16-15, at 2,430 feet, and set 6-inch at 2,645 feet in No. 6 Merriwether, Section 6-16-15; A. H. Ramage, drilling plug at 2,586 feet in No. C-9 Lawton, Section 10-16-15, and set 6-inch at 2,567 feet in No. 10 James, Section 6-16-15.

Smitherman & McDonald's No. 1 Dumas, Section 23-16-16, is bailing 50 feet of broken sand at 2,075 feet and the hole is full of salt water; Southern Crude Oil Producing Co., drilling at 1,500 feet in No. 6 Lyell, Section 3-16-15; Sun Oil Co. has three wells nearing completion on the Hays lease, Section 3-16-15; The Texas Co., drilling at 550 feet in No. 9 Alphin, Section 3-16-15; Unity Petroleum Co. has three wells nearing completion on the Roper lease, Section 3-16-15; Vance and others, drilling at 2,150 feet in No. 1 Kane, Section 12-16-16, and Wetherbee and others at 1,900 feet in No. 2 Holloway, Section 6-16-16.

Ouachita County

Arkansas Drilling Co. 8¼-inch at 1,880 feet in No. 1 Turnage, Section 34-15-16; Arkansas Fuel Oil Co., drilling at 2,500 feet in No. 9 Snyder, Section 34-15-15, deepened from 2,490 feet where it blew in making 25,000,000 feet of gas and 8,000 bbls. of salt water; Atlantic Oil Producing Co., drilling No. 6 Berg, Section 30-15-15, at 1,750 feet; Bailey & Murray set 6-inch at 2,037 feet in No. B-7 Rhoten, Section 32-15-15; Colcord and others set 6-inch at 2,570 feet in No. A-3 Laney, Section 31-15-15; J. E. Crosbie, drilling at 3,260 feet in No. 12 Berry, Section 33-15-15, and Empire Oil & Fuel Co., drilling at 1,600 feet in No. 7 Bradley, Section 30-15-15.

Giles and others are arranging to test 8 feet of broken sand at 2,104 feet in No. 4 Neeley, Section 26-15-16; Gulf Refining Co., coring at 2,393 feet in No. 6 S. Bennett, Section 32-15-15, and drilling at 2,575 feet in No. A-18 Umsted, Section 33-15-15; Houston Oil Co. set 4½-inch at 2,550 feet in No. 9 B. T. Laney, Section 31-15-15; Humble Oil & Refining Co., drilling at 2,215 feet in No. 6 Flannigan, Section 6-16-15; set 6-inch at 2,430 feet in No. 7 Hildebrandt, and drilling at 2,025 feet in No. 8, Section 28-15-15; drilling at 2,090 feet in No. 10 Laney, Section 32-15-15, and at 1,075 feet in No. 6 Umsted, Section 5-16-15.

Imperial Oil & Gas Products Co., drilling at 2,380 feet in No. 7 McClannahan, Section 6-15-15, and rigging up to drill No. A-8, same section; Lion Oil & Refining Co., drilling at 1,950 feet in No. 1 Forest City Box Co., Section 25-15-15; Magnolia Petroleum Co. set 6-inch at 2,287 feet in No. 4 Brown, Section 26-15-17; Marine Oil Co., arranging to pump No. 5 Snyder and setting liner to test 19 feet of sand at 2,574 feet in No. 10, Section 34-15-15, and drilling at 3,290 feet in No. 9 Umsted, Section 5-16-15. Pat Marr is arranging to pump No. 1 fee, Section 3-16-15, at 2,380 feet.

Kellery Drilling Co. is drilling at 2,550 feet in No. 1 Reynolds, Section 7-14-16, 4 miles south and a little east of Camden.

Gas Well Closed in

Natural Gas & Petroleum Co. has closed in the big gas well on the Laney lease, Section 31-15-15, which has been blowing wild at 2,702 feet. Ohio Oil Co. set 10-inch at 600 feet in No. 6 Goodwin, Section 29-15-15; arranging to pump No. 4 Lewis, Section 29-15-15, at 2,048 feet; has 300 feet of oil in the hole in 29 feet of sand, and is arranging to pump No. 5 Lewis, Section 26-15-15, at 2,089 feet; Phillips Petroleum Co., drilling No. 9 Harris, Section 34-15-15, at 1,985 feet; has nine rigs running on the Joyce lease, Section 33-15-15 and three on the Laney, Section 31-15-15, and the Pure Oil Co. is drilling at 2,460 feet in No. 10 Brister, and at 2,110 feet in No. 5-A Brister, Section 28-15-15.

Sam Richardson is drilling at 2,280 feet in No. 2 Rhoten, Section 32-15-15; Simms Oil Co. is coring at 2,608 feet in No. 10 F. A. Laney, Section 31-15-15; drilling at 650 feet in No. 6 Reynolds; arranging to pump No. 5 and No. 7, Section 32-15-15, and set 6-inch in No. 1 and No. 2 Berg, Section 32-15-15; Sinclair Oil Co. set 6-inch at 2,435 feet in No. 16 Berry, Section 33-15-15; Southern Crude Oil Producing Co., coring at 2,550 feet in No. 5 Joyce, Section 34-15-15, and Standard Oil Co. running 15 rigs to the deep sand.

Sun Oil Co. is arranging to pump No. 5 and No. 6 Johnson, Section 30-15-15; Sure Oil Corp., drilling No. 3 Snyder, Section 34-15-15, at 2,120 feet; The Texas Co. has three wells temporarily abandoned on the Berry lease, Section 33-15-15, and setting 4½-inch at 2,420 feet in No. 16; bailing to test 10 feet of sand at 1,980 feet in No. 5 Neeley, Section 27-15-16, and drilling at 1,385 feet in No. 1 Watts, Section 27-15-15; Unity Petroleum Co. set 8¼-inch at 1,955 feet in No. 2 Henry-Murphy, Section 2-16-15, and drilling at 2,560 feet in No. 9 Umsted, Section 33-15-15.

Willroy and others tested 25,000,000 feet of gas and 5,000 bbls. of salt water in No. 1 Berg, Section 28-15-15, and is arranging to re-cement casing at 2,575 feet.

In the Stephens district, the Humble Oil & Refining Co. is rigging up to drill No. 1 Myer estate, Section 33-13-19.

Bienville Parish

J. E. Smitherman's test on the Hunt-Hodge Lumber Co. lease, Section 8-15-5, 6 miles south of Bienville, is shut down for water at 2,635 feet.

Bossier Parish

Clem Clarke is down 300 feet in a test on the Wutzke lease in Section 2-18-12, 10 miles northeast of Shreveport.

J. A. McCullough, trustee, is drilling at 800 feet in No. 2 Hodges, Section 25-16-12, in the Elm Grove district.

Bellevue Field

G. W. Wetherbee is drilling at 300 feet in fee No. F-12, Section 23-19-11, in the shallow sand territory.

Caddo Parish

In the Pine Island district, the Dixie Oil Co. is drilling at 1,200 feet in No. 69 Robertshaw, Section 14-21-15; Double I Oil Co., at 1,525 feet in No. 4 Spell, Section 15-21-15; Fortuna Oil Co., arranging to pump No. 15 Doan-Thigpen, Section 5-20-15, and drilling at 680 feet in No. 1 Spell, Section 29-21-15; drilling at 3,480 feet in No. 2 Levee Board, Section 8-20-15, and at 200 feet in No. 20 Raines, Section 22-21-15; Lewis Oil Corp., drilling at 500 feet in No. 12 Raines, Section 22-21-15; D. C. Richardson, derrick up for No. 1 Youree-Randolph, Section 13-20-15, and Ohio Oil Co., arranging to bail No. 17 E. K. Smith, Section 12-21-15, at 3,694 feet.

In the Hosston district, Austin Oil Co. is arranging to pump No. 24 Hoss, Section 24-22-15, at 1,077 feet; Dixie Oil Co. set 4½-inch casing at 3,500 feet in No. 1 Jolly, Section 27-22-15; drilling at 900 feet in No. 3 Hoss, and derrick up for No. 4, Section 24-22-15; Shawmut Oil Co., rigging up to drill No. 3 Jolly, and derrick up for No. 4, Section 22-22-15.

Flournoy, trustee, is drilling at 2,837 feet in No. 1 Simpson, Section 8-16-15, half way between Reisor and Bethany.

Fortuna Oil Co. is drilling at 3,910 feet in No. 1 Mitchell, Section 17-18-16, 4 miles west of Cross Lake and 15 miles west of Shreveport.

Haynes Brothers have temporarily

(Continued on Page 116)

East Central Texas

By Special Correspondent

CORSICANA, Tex., Sept. 19.—East Central Texas' contribution to the week's general review of oil operations is very meager. Many contractors have moved their tools out of this district for Arkansas and other rotary fields and the amount of field work of a really active character is very small.

Swearingen and others' important test on the Dean farm, Thompson survey, Groesbeck district, Limestone County, has been definitely abandoned at 3,500 feet. Kerr & Gillette tested salt water at 3,242 feet in their No. 1 Bates on the Varela survey.

In Milam County, the various tests are all far below 3,000 feet with no encouraging signs. Butler Boys' No. 1 Woodall, Wickson survey, was drilling in broken lime at 3,620 feet. Simms Oil Co.'s No. 1 Stidham, Jones survey, got the top of the lime at 3,756 feet and was drilling at 3,800 feet. John E. Lee's No. 1 Isaacs, Chambers survey, was shut down at 3,305 feet awaiting rock bit. The Austin chalk was penetrated at 2,480-2,985 feet; Magnolia Petroleum Co.'s No. 1 Kime, Carson survey, was drilling in lime at 3,850 feet, with a hole full of water. All these tests are looking for the Edwards lime. The impression has begun to prevail of late that the 20,000-bbl. initial producer of the Humphreys Oil Co. in the Kosse district, Limestone County, several years ago was not an Edwards lime producer, but a freak that produced from a crevice. It made only 45,000 bbls. of cude before it stopped entirely.

In Navarro County, the test of Penn and others in the Bazette district, No. 2 Vinson, on the S. Bailey survey, was drilling below 2,905 feet. In the Powell Field, the Humble Oil & Refining Co. abandoned Nos. 22 and 23 Davis, which were dry in the 1,600-foot horizon. No. 22 was abandoned at 1,639 feet and No. 23 at 1,664 feet; Nos. 24 and 25 are drilling and locations have been made for Nos. 26 and 27.

In the Barclay Pool, Richland district, Barclay & Meadows were swabbing salt water from sand at 3,197-3,200 feet, total depth 3,200 feet, in No. 3 Hillburn Boren survey. Garland Kent was drilling dry sand at 3,017-41 feet, total depth 3,051 feet, in No. 1 McDaniels. The Sun Oil Co.'s No. 1 Swink, Borne survey, got sand and shale at 2,922-3,022 feet, from which it is producing 50 bbls. of oil with an accompaniment of 150 bbls. of salt water.

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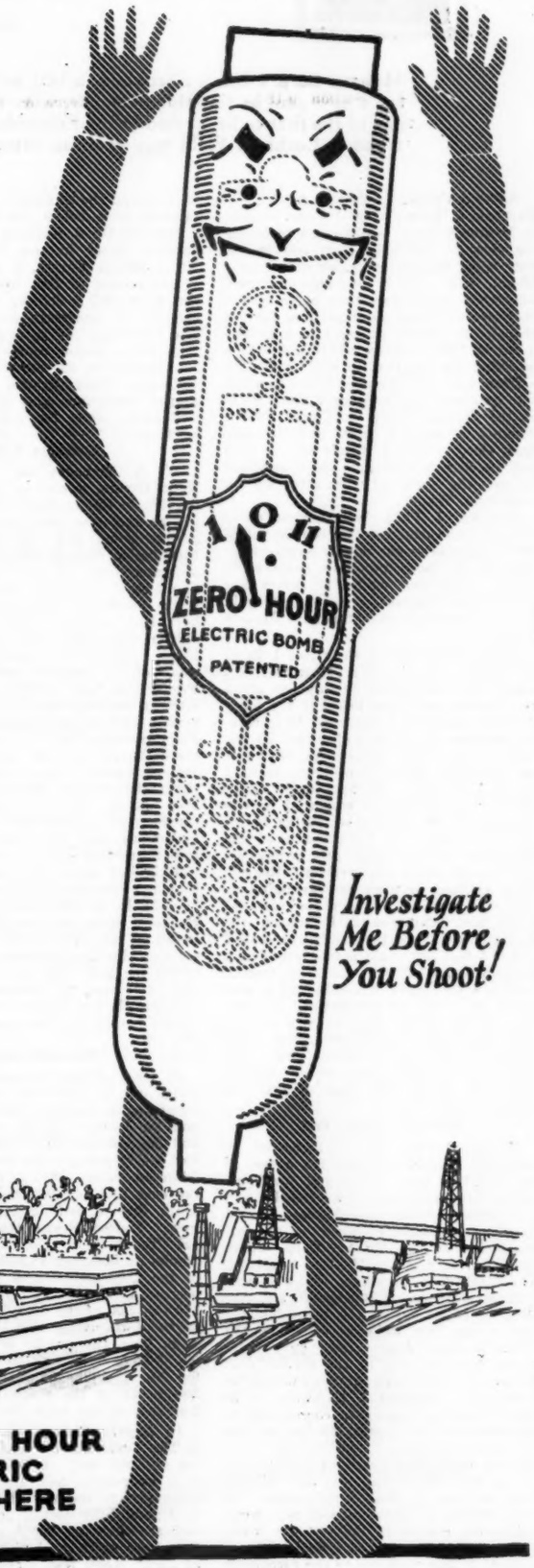

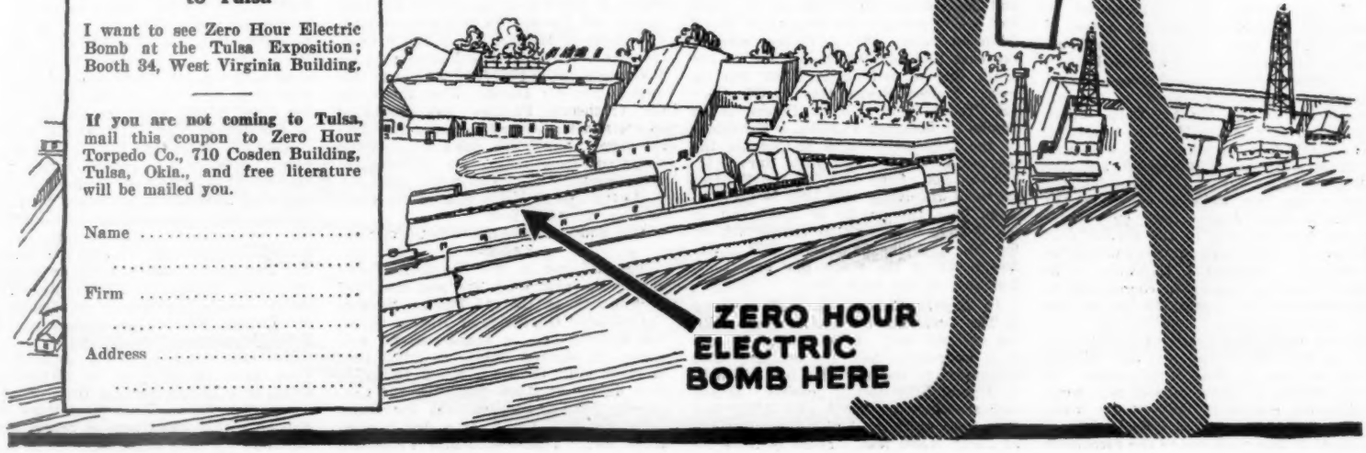

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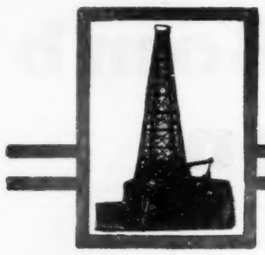

Southwest Texas Fields

By Staff Correspondent

Milham Corp.'s No. 1 Eastwood, a test in Somerset shallow field, and hope for a new pool in Jim Hogg County, were features of week. Eastwood well, one of the first to be carried below Edwards, is at 4,100 feet. North and south trend in Lockhart Field may promise extensions there.

SAN ANTONIO, Texas, Sept. 21.—Eastham & Tarver's No. 1 Viola Wilson, in Medina County, which came in pumping close to 100 bbls. from 966 feet is now being scouted by major scouts as a 50-bbl. well. It is probably pumping somewhat more than that actually but they are counting on it settling further though the owners believe they can keep it up to 100 or above. This well which is giving the Ina Pool in Medina County a fresh start and the new pool struggling into existence in Jim Hogg County south of the Henne, Winch & Fariss Pool a distance of some 7 miles and the Milham Corp.'s No. 1 Eastwood, a deep test in Somerset shallow field, continue to get the bulk of the attention in southwest Texas.

The No. 1 Viola Wilson shut down for a day the past week to change valves which have been cut out by sand, otherwise it has been pumping steadily 24 hours a day and while the oil is low gravity (23 Baume), it is a good well. It is attracting attention to Medina County.

Magnolia Petroleum Co.'s No. 1 Bank of survey 415 in Jim Hogg County which was the second attempt to get a new shallow pool established in the county is not entirely a success. It is making 100 barrels of fluid of which 20 per cent is oil. The percentage of water has decreased since the well was brought in at 1,268 feet. It first made about 200 barrels of fluid of which 35 barrels was oil. J. W. Pippin set casing in his No. 3 Palacious a little north of the Magnolia well last week and is now attempting to bring the well in. Reports since drilling in were not available as this was written. It got the sand at 1,270 feet. Number 2 Palacious, the first well to locate the sand, was drilled to 1,305 feet but could not be completed. It was supposed the oil was coming from the bottom of the hole and it was cased off. Due to uncertainty at that time as to where the oil was coming from that well was not completed. The Palacious well is on survey 291. The location is 7 miles south of the Henne, Winch & Fariss extension of the Jim Hogg County Pool.

Milham's Deep Test

Milham Corp.'s No. 1 Eastwood in Somerset is setting casing for a test at below 4,100 feet. The well until recently has been carried as the Ballard & Underwood well, it having been started by them on contract prior to the organization of the Milham Corp. which is a subsidiary of the Mexican Seaboard. The black lime in which the well was drilling softened up somewhat and the showing of oil led to the test. This is one of the first wells to go below the Edwards since deeper tests have come to be discussed due to the Edwards so frequently carrying sulphur water or being dry. Number 1 Eastwood is in black lime that seems to correspond to the horizon of the Pennsylvanian but has not been positively identified as that. Six-inch casing was expected to be hauled out to the test Friday last and will go into the hole the first of this week. It will probably be the middle of next week before the results of the test are made known. There is a great deal of local interest in this well due to the formation it is in and the anxiety to see something produce from below the Edwards.

Humble Oil & Refining Co. which got sulphur water in the Edwards in its No. 2 Minna Coreth, 2 miles southeast of the corner of San Antonio cased off the water and is drilling deeper and will attempt to penetrate formations below the Edwards. It is more than likely that other major companies failing to get production in the Edwards in the Balcones Fault System will drill to deeper formations and in drilling wells will make plans for deeper drilling in advance.

Lockhart Field

W. A. Stephens and others' No. 1 Robt. Gwinn, a half mile south of production in the Lockhart Field, was bailing as this was being written and was getting some oil. The well had not been bailed down and final results were not determined. It was claimed it looked like a well. It had the Serpentine which is the producing formation in the Lockhart Field which it got at 1,654 feet, only a little lower than the bulk of the Field. The well is about a half mile south of the nearest wells on the Gulf Production Co.'s Riddle lease. If it makes a producer and proves up the intervening territory it will give the Lockhart Field considerable of a north and south trend instead of the customary northeast-southwest trend that fields in the region of the Balcones Fault have been taking. Also it is going to open up considerable speculation as to further extensions and give considerable additional encouragement to wildcatters. The well is just south of a lease owned by Stebbins interests of Tulsa and another held by R. S. Kampmann of this City. Between those and the field are Riddle leases of the Gulf Production Co., the Gulf owning the bulk of the acreage between the new well and the field. The new well was not proven as this was written. It had bailed down to 600 feet off the bottom and was getting considerable oil.

Mirando Field

In Duval County Associated oil which tested out at 1,780 feet and got a little oil and some salt water in No. 1 Southerland in Duval County resumed drilling and had another little showing at 1,800 feet. Co-Operative Drilling Co.'s No. 2 Dinn on survey 464, 1,170 feet west of the east line and 960 feet north of the south line is drilling at 1,840 feet on rock. United States Gas & Oil Co.'s (E. T. Burton), No. 1 Peters is in gumbo at 550 feet and No. 1 Benavides in the Cole gas field is setting up, the location being on Block 10 of Survey 11, 175 feet east of the west line and 175 feet north of the south line. O. W. Killam is in lime and gumbo at 2,885 feet in No. 3 Benavides and has the derrick up for No. 1 Ayres on Survey 353, 2,640 feet north of the south line and 1,500 feet east of the west line.

In Zapata County, the only activity is The Texas Co.'s No. 1 Jennings drilling at 3,830 feet. It is a deep test and it is understood now the company does not expect to test anything but will drill to around 5,000 feet if possible. It has had showings at 3,237 and 3,317 feet that were quite good and a smaller one at about 3,800 feet. There is little interest in the well for other companies since it is in the center of a block of 37,000 acres all held by The Texas Co.

In Jim Hogg County Beauchamp's No. 1 Givens seemed a failure late last week. It is a little over a half mile east of the Rydal Oil Corp.-The Texas Co.'s joint ownership well in the Jim Hogg Pool on Block No. 5 of the Vela subdivision of Survey 580. He found the rock at 2,181 feet but under it no sand. Drilling was continued down to 2,280 feet but it seemed probable the well will be abandoned. Production in the proven field in the Jim Hogg Pool, is had at a little below 2,000 feet. Efforts to pick up the pool in other than the shoestring running due north and south seem to have registered another failure. Braswell Norcross and others have spudded in on the White subdivision of Survey 580 at a point about 3 miles southeast of the Beauchamp well and have made about 100 feet.

In the proven district in Jim Hogg County Alworth Brothers are rigged up on Block No. 9 of the Vela subdivision in the northwest corner of the block and will spud in shortly. Rydal Oil Corp. is building the derrick for the first of the joint ownership tests with the Rycade Oil Corp. on Block 7 of the Vela subdivision, Alexander and others are spudding in No. 1 Vela on Block A-1 of the Vela subdivision. Killam is fishing at 2,490 feet in No. 12 Martinez and Kitselman & St. Albans are drilling at 400 feet in No. 20 Vela.

In Webb County, Morgan and others' No. 1 Webster in the Carolina-Texas Field on Survey 684 has been completed and is a gas well of about 60,000,000 feet open flow, at 2,085 feet. Muckelroy's No. 1 de la Garza in the Carolina-Texas Field is shut down for lack of water. Johnson & DeTray in No. 1 de la Garza are drilling at 800 feet. Killam & Chenault have the derrick up for No. No. 1 Gates in Block 5 of Survey 19 of Webb County in the Leaseholders Field, the location being 660 feet south of the north line and 500 feet west of the east line. It is another attempt to get oil in this district that completed one well at around 1,050 feet a couple of years ago but has been slow in developing. Texas Wildcat Co. is rigging up on No. 1 Laurel in the proven district. Rydal Oil Corp. has completed Nos. 15 and 16 Puig. Ball and others are drilling out the plugs in No. 3 Puig. Cole Petroleum Co. is drilling in shale at 1,900 feet in No. 3 Benavides.

Atascosa Field

Rio Bravo Oil Co. is setting casing at 2,710 feet in No. 1 Brown last week carried as No. 2 Cortinas, near Anchorage in Northwestern Atascosa County. In No. 1 Cortinas started by J. S. Suttle and taken over by Rio Bravo, formations similar to the Serpentine were found carrying a little oil and in No. 2 Cortinas to the southeast also. No. 1 Brown is 1,500 feet southwest of No. 1 Cortinas. Atascosa Oil & Gas Co. started drilling with rotary on No. 1 Peeler 2½ miles north of Campbellton last week and is now down a few hundred feet. Halloran

(Continued on Page 127)

News of Mexican Fields

By George Blardone

TAMPICO, Mexico, Sept. 17.—Only 11 wells were completed in Mexican fields during the past week, (the twelfth well has already been reported), with seven failures and four producers. New production on these routine wells totals, potential head, 4,550 bbls. The twelfth well, reported last week, was International Petroleum Co.'s sensational No. 2 Piedras, which is rated 25,000 bbls. at 1,700 feet. Of the more routine completions during the week, included in the 11 above reported, the best of the lot was International Petroleum Co.'s No. 221, Lot 5, Cacalilao Sector of the Northern Fields, which, at 1,990 feet, is rated good for 2,500 bbls. Another completion in Cacalilao, Lot 4, was Transcontinental Petroleum Co.'s No. 212, which, at 1,850 feet, is good for 500 bbls. In the old Panuco Sectors, Consolidated Oil Fields of Mexico, No. 5, Lot 6 Camolote, is conservatively estimated good for 1,500 bbls. at 2,156 feet, although this well is not yet tested. East Coast Oil Co. (Southern Pacific), has purchased this oil and is trying to get a line laid there now, but heavy rains are delaying the operations, this being the regular rainy season. East Coast Oil Co.'s No. 42 Laguna de la Milpa is good for about 50 bbls. at 2,370 feet.

The South Fields had no completions.

Failures

The failures in the Northern Fields during the past week are best described as follows: In the old Panuco Sectors, Consolidated Oil Fields of Mexico, No. 4, Lot 6, Camolote, is abandoned for salt water (it showed fluid), at 2,205 feet. Mexican Gulf Oil Co.'s No. 3 Esterillos is a duster at 2,500 feet. In the Corcovado Sector, International Petroleum Co.'s No. 217, Lot 5, is a dry hole at 2,253 feet. Transcontinental Petroleum Co.'s Nos. 204 and 205, Lot 4, are both dry holes at 2,110 and 2,120 feet respectively; and in the Corcovado Sector, this company's No. 20, Lot 6, is the same at 2,500 feet. In the Los Esteros, State of Tamaulipas, north of Tampico, American International Fuel Co.'s No. 18, is a dry hole at 2,350 feet.

August Completions

There were 68 completions in Mexican Fields during the month of August, of which 17 were producers, with new potential production of 52,025 bbls., a little better than the average of the past few months in so far as new flush production is concerned. Of these new producers, the Northern Fields finished 16 wells, the South Fields 1. The new flush production is divided as follows: Northern Fields, 47,025 bbls.; South Fields, 5,000 bbls. The South Fields production was a 5,000-bbl. well of Huasteca Petroleum Co., No. 50 in its Tierra Blanca Pool; the Northern Field's principal well was No. 11 Chapacao, of Mexican Petroleum Co., in the Ebano Sector, rated 20,000 bbls.; its No. 33 Chijol at 5,000 bbls., and International Petroleum Co.'s No. 218, Lot 5, Cacalilao, rated 10,000 bbls., although actual flow reports, at a later date credited it with making 12,000 bbls. The other Northern Fields completions, making up the difference were smaller wells, the only one of special interest being Venable and others' No. 29 Caracol, which, virtually a wildcat, came in gauging 1,000 bbls. This latter well is the largest yet drilled in the Caracol Sector, the nearest pool to Tampico proper.

The fact that the two first days of the week were big holidays in Mexico resulted in a general slowing down of business everywhere. Field operations are routine with nothing new to report from the more outlying districts.

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Gulf Coast Oil Operations

By P. L. McGreal

Production declines in Coastal Pools. Gulf Production Co.'s No. 8 Chesson, Orange Pool, makes 2,000 bbls. and Humble Oil & Refining Co.'s No. 12 Winifree, 1,200 bbls. F. M. Long has 800-bbl. well in No. 1 River, Humble Pool. Retrieve Co.'s No. 1 Westheimer, between Houston and Humble deepened.

HOUSTON, Tex., Sept. 21.—Gross production in the Gulf Coast Pool is declining again, following a spurt for the weeks ending September 5 and 12, due to the completions of big wells in the Hull and Orange districts. The estimated gross for the week ending September 19 is 101,335, a decrease of 810 bbls. from the previous week.

The completions for the week number 13, of which 4 were dry and 1 a salt water hole, leaving 8 net producers. The initial production for the week is 6,510 bbls., compared with 8,800 bbls. last week. The following is a tabloid of the work for the week:

District	Comp.	Prod.	Dry	S.W.	Bail.
Batson	1	20	0	0	0
Big Creek	1	125	0	0	0
Goose Creek	1	1,500	0	0	2
Humble	1	815	0	0	0
Hull	1	200	0	1	0
Orange	2	3,650	0	0	0
Pierce Junction	0	0	0	0	1
Spindletop	1	0	1	0	0
South Liberty	2	200	1	0	0
Miscellaneous	2	0	2	0	0
Total for week	13	6,510	4	1	3
Total last week	17	8,800	5	1	2

Wells Completed

In the Orange Pool, the Gulf Production Co.'s No. 8 Chessom came in flowing 2,000 bbls. initially at 4,620 feet, and its No. 1 Grubbs, on the northwest side, a work-over, is flowing 650 bbls. at 3,200 feet. The Humble Oil & Refining Co. got a 1,000-bbl. well in No. 12 Winifree at 4,616 feet, flowing through a three-fourths inch choker.

The Gulf Co.'s No. 31 State Land, in the bay at Goose Creek, came in early in the week with an initial output of 1,500 bbls. at 2,850 feet. The Gulf Coast-Crown Central joint No. 27 Gallard is bailing at 3,335 feet, as is the Humble Oil & Refining Co.'s No. 28 on Galliard Peninsula, at 4,210 feet. Last week this hole was blowing dry gas.

In the Hull Pool, the Republic Production-Houston Oil Co.'s joint No. 86 Dolbear, a work-over, is heading 200 bbls. at 2,265 feet, and the Humble Oil & Refining Co.'s No. 9 Guedry was a salt water well at 3,280 feet.

In the South Liberty Pool, The Texas Co.'s No. 7 Simms, on the north side of the original productive area, will make a 200-bbl. pumper at 3,475 feet. The Associated Oil Co.'s No. 5 Deussen was abandoned in salt at 3,600 feet.

At Pierce Junction, H. R. Cullen's No. 6 Howe is bailing at 3,925 feet, after being worked over. The Ada Belle Oil Co.'s No. 99 Paraffin, in the Batson Pool will pump 20 bbls. at the shallow depth of 575 feet. The Lillian Oil Co. abandoned No. 1 Terrell at Spindletop at 875 feet. The Gulf Production Co."s No. 24 Davis, at Big Creek, is flowing 125 bbls. by heads at 2,950 feet, and No. 25 is rigging to start drilling.

F. M. Long has an 800-bbl. well in No. 1 River, on the north side of the Humble Pool at 2,200 feet. The Southern Petroleum Co.'s No. 15 Landslide, a work-over, is pumping 15 bbls. Its No. 42 Landslide is rigging to work over. The Traders Oil Co.'s No. 2 Bissonett, on the northwest side, reported last week as a 500-bbl. well at 4,200 feet, is now flowing salt water. It will be worked over.

Outside of the pools, the Retrieve Oil Co.'s No. 1 Westheimer, between Houston and Humble, bailed water at 2,816 feet and is being drilled deeper. Considerable interest was manifested in this test, due to its location and the belief that a saline dome exists somewhere about 10 or 12 miles north of Houston. The Rycade Petroleum Corp.'s No. 1 Norsworthy, in the Green Bayou section of Harris County, east of Houston, was abandoned at 4,010 feet. This is another section in which geophysical tests with thel seismograph and Eotvos torsiona balance systems are said to have shown evidences of a dome.

Estimated Gross Production

The estimated gross production of the Coastal Pools is placed at 101,335 bbls. for the week ending September 19, of which 11,325 bbls. are credited to the South Louisiana districts, and 90,010 bbls. to the South Texas pools. Old wells declining in part offset the new production developed during the week.

The following gives the estimated gross for each district:

District	Gross Bbls.
Batson	1,450
Blue Ridge	780
Barber Hill	90
Big Creek	1,025
Dayton	55
Damon Mound	1,145
Edgerly (La.)	560
Goose Creek	9,900
Humble	4,450
Hull	21,250
High Island	405
Jennings (La.)	785
Lockport (La.)	3,100
Markham	75
Orange	16,200
Pierce Junction	1,020
Spindletop	1,075
Saratoga	1,530
Sour Lake	4,250
South Liberty	14,000
Vinton (La.)	7,800
Welsh-Anse La Butte (La.)	80
West Columbia	11,050
Miscellaneous	170
Total	101,335

Southwest Fields

A slight increase is noted in the gross production estimates for the Southwest fields, the gain being 225 bbls. for the week of September 19. The estimates for each field is as follows:

Luling	22,220
Laredo	4,025
Somerset	2,420
Calliham	270
Rockdale-Minerva	875
Jim Hogg County	3,685
Lockhart (Lytton Springs)	12,170
Total	45,665
Grand total for week	147,000
Grand total for last week	147,585
Net decrease	585

Drilling in the Pools

Fewer wells are drilling in the pools than at any time this year. The South Liberty Pool in particular has less activity than any of the others, with an average output above 10,000 bbls. Fixing a standard of 15,000 bbls. per day production for a major district leaves the Coastal region with just two that come within that designation. The Hull district ranges around 20,000 bbls., and above some weeks. This week the Orange district runs more than 16,000 bbls.

In the South Liberty Pool, the Gulf Production Co. is rigging to start drilling Nos. 12-A Deussen and 4 Antonie. T. J. Whitley is drilling No. 1 Baldwin on the east side at 455 feet. The Sinclair Oil & Gas Co.'s No. 5 Condict is around 3,510 feet, and the Peer Oil Co.'s No. 1 Hamiltton, south of production, is deepening at 3,455 feet.

In the Hull Pool, the Gulf Production Co.'s No. 56 Phoenix is drilling at 3,435 feet, with No. 57 rigging and No. 58 drilling below 1,435 feet, with No. 59 rigging. No. 16 Scarborough is drilling around 2,330 feet. The Republic Production-Houston Oil Co.'s No. 20 Dolbear, a work-over, is fishing at 3,798 feet. No. 117 Dolbear is doing the same at 3,800 feet. The Yount-Lee Oil Co.'s Nos. 5 and 8 Stengler, on the north side, are both working over. The Mecom Oil Co. is working over Nos. 4 and 6 Taylor, on the northwest side of the flank of the dome. The Peer Oil Co.'s No. 8 Harrison is drilling around 2,986 feet. The Red Cantor Oil Co.'s No. 1 Smith is around 1,875 feet, and the Higgins Oil & Fuel Co.'s No. 3 Taylor is drilling about 3,080 feet, with No. 7 rigging. The Texas-Vacuum Oil Co.'s joint No. 6 Hannah, on the southwest side, is drilling around 2,980 feet.

At Pierce Junction, the Gulf Production Co.'s No. 17 Taylor is drilling around 4,230 feet. A derrick is standing for the Rio Bravo Oil Co.'s No. 2 Settegast, on the northwest side of the dome.

At Blue Ridge, the Gulf Production Co.'s No. 12 Blakely is drilling around 4,080 feet, and The Texas Co.'s No. 13 Robinson, on the west side of the dome, is drilling about 4,300 feet.

Orange Pool

In the Orange Pool, the Sinclair Oil & Gas Co.'s No. 1 Turner, south of production, is drilling around 3,620 feet. Sun Oil Co.'s No. 1 Johnson is fishing at 4,050 feet, and No. 3 Belile is drilling around 3,825 feet. The Gulf Production Co.'s No. 3 Hamman-Consolidated is drilling around 5,325 feet, or 45 feet below a mile in depth; No. 3 Heger fee is rigging up to work over. Atlantic Oil Producing Co.'s No. No. 1 Peveto is drilling around 1,000 feet. The Rycade Oil Corp.'s No. 2 State "B" is drilling around 3,825 feet; No. 1 State "C" at 4,650 feet. The Humble Oil & Refining Co.'s No. 23 Chesson "B" is a location; No. 19 Chesson "A" is drilling around 1,375 feet. The Kishi Development Co.'s No. 6 McGuire is drilling around 3,380 feet. Orange Petroleum Ce.'s No. 5 Winifree is drilling around 4,650 feet; No. 9 Chesson is drilling around 3,440 feet, and No. 12 at 1,250 feet. Continental Oil Co.'s No. 16 Chesson is drilling around 4,250 feet; No. 9 is drilling around 4,375 feet. Brownie Babbitte Oil Co.'s No. 11 Carbello, drilling at 3,300 feet, and No. 1 Carbello "B" is down 4,375 feet.

In the Spindletop Field the Gulf Production Co.'s No. 205 is rigging up to deepen. The Stella Oil Co.'s No. 7 Keith-Ward is shut down at 1,060 feet. Lotus Oil Co.'s No. 1 Gladys is drilling around 1,100 feet. Sun Oil Co.'s No. 49 Lone Star and Chescent is shut down at 810 feet. Unity Oil Co.'s' No. 1 Trembly is shut down at 1,000 feet. Yount-Lee Oil Co.'s No. 1 McFadden is drilling around 225 feet.

Goose Creek

In the Goose Creek Pool, the Humble Oil & Refining Co.'s No. 64 Simms-Smith is drilling around 4,486 feet; No. 4 Harrell is drilling around 4,725 feet; No. 3 A. Smith is rigging up to work over. Gulf Coast Oil Corp.'s No. 27 Gaillard is bailing at 3,335 feet. Southern Exploration Co.'s No. 5 Freeman is drilling around 2,650 feet. Norman Bruce Petroleum Co.'s No. 3 Scorrega is drilling around 3,325 feet. Gulf Production Co.'s No. 32 Beaumont is drilling around 3,175 feet; Sun Oil Co.'s No. 17 B. Smith is pumping 25 bbls. at 2,500 feet.

At Batson, the Ada Bell Oil Co.'s No. 99 Paraffin will pump 20 bbls. at 575 feet; Paraffin Oil Co.'s No. 60 Paraffin is drilling around 800 feet. The Texas Co.'s Lezarza is drilling around 2,225 feet. Sterling Oil Co.'s No. 1 Hooks is drilling around 1,375 feet. Kirby Petroleum Co.'s No. 3 Hodges is drilling around 1,100 feet.

Rio Bravo Oil Co.'s No. 2 Fountain at Saratoga is drilling around 3,375 feet. Vacuum Oil Co.'s has a derrick up for No. 2 Teel, and Fountain Production Co.'s No. 3 Ogden tested salt water last week and shut down at 2,000 feet.

Humble Oil & Refining Co."s No. 1 Wilson "B" at West Columbia is drilling around 1,395 feet; No. 1 M. and W. is drilling around 3,950 feet. Hyde Production Co.'s' No. 8 McGregor is drilling around 810 feet.

Sun Oil Co."s No. 8 Cade in the High Island, Galveston County, Pool, is drilling around 3,300 feet; No. 5 B. and O. is down 310 feet; No. 1 is bailing at 2,240 feet. Gulf Production Co.'s No. 4 George E. Smith is drilling around 2,650 feet; No. 3 is drilling around 3,100 feet.

In the Markham Pool, Rycade Petroleum Corp.'s No. 2 Gray is drilling deeper at 4,425 feet in shale. A derrick is up for the Gulf-Houston Gas Co.'s No. 2 Myers.

At Damon Mound, Hamm & Co.'s No. 2 Bryan is around 1,000 feet.

South Louisiana Pools

In the Lockport district, near Lake Charles, the Vacuum-Gulf Co.'s joint No. 3 Miller is holding near its original output, flowing 2,000 bbls. per day. Their joint No. 1-B Phoenix is bailing at 5,575 feet.

Joint No. 4 Miller is drilling around 3,735 feet, with a location made for No. 5 Miller. No. 2 Farquhar is drilling below 4,700 feet. No. 3 Lock-Moore is at 3,325 feet, and No. 1 Prien Lake is around 2,023 feet. The Marland Co.'s No. 1 Phoenix is below 4,135 feet.

In the Edgerly Pool, Lake Charles Petroleum Co.'s No. 2 Fairchilds is drilling around 2,910 feet.

In Calcasieu Parish at Lake Arthur, Rycade Petroleum Corp. lost the hole for No. 1 Hooks and is drilling a new hole at 575 feet. Earle Roole"s No. 1 Castle is below 1,100 feet. Union Sulphur Co. has locations for No. 1 Brady, No. 2 Faist and No. 1 Dorion. Ohio Oil Co. is rigging No. 1 Hager Dome. Pure Oil Co.'s No. 2 Sweetlake is drilling around 2,750 feet. Yount-Lee Oil Co. is shut down at Hackberry Island, Cameron Parish.

In St. Mary Parish, George Leland's No. 1 Caffery, Cote Island, is around 1,155 feet.

Rockdale-Minerva

In the shallow sand section of Milam County, the Texas Petroleum Co.'s No. 9 Phillips is flowing 65 bbls. by heads. W. A. Jones' No. 3 Phillips is pumping 75 bbls., and Milam Production Co.'s No. 3 Gaither, 40 bbls.

Wells drilling in the Rockdale-Minerva district number 21. The posted price is $1.95.

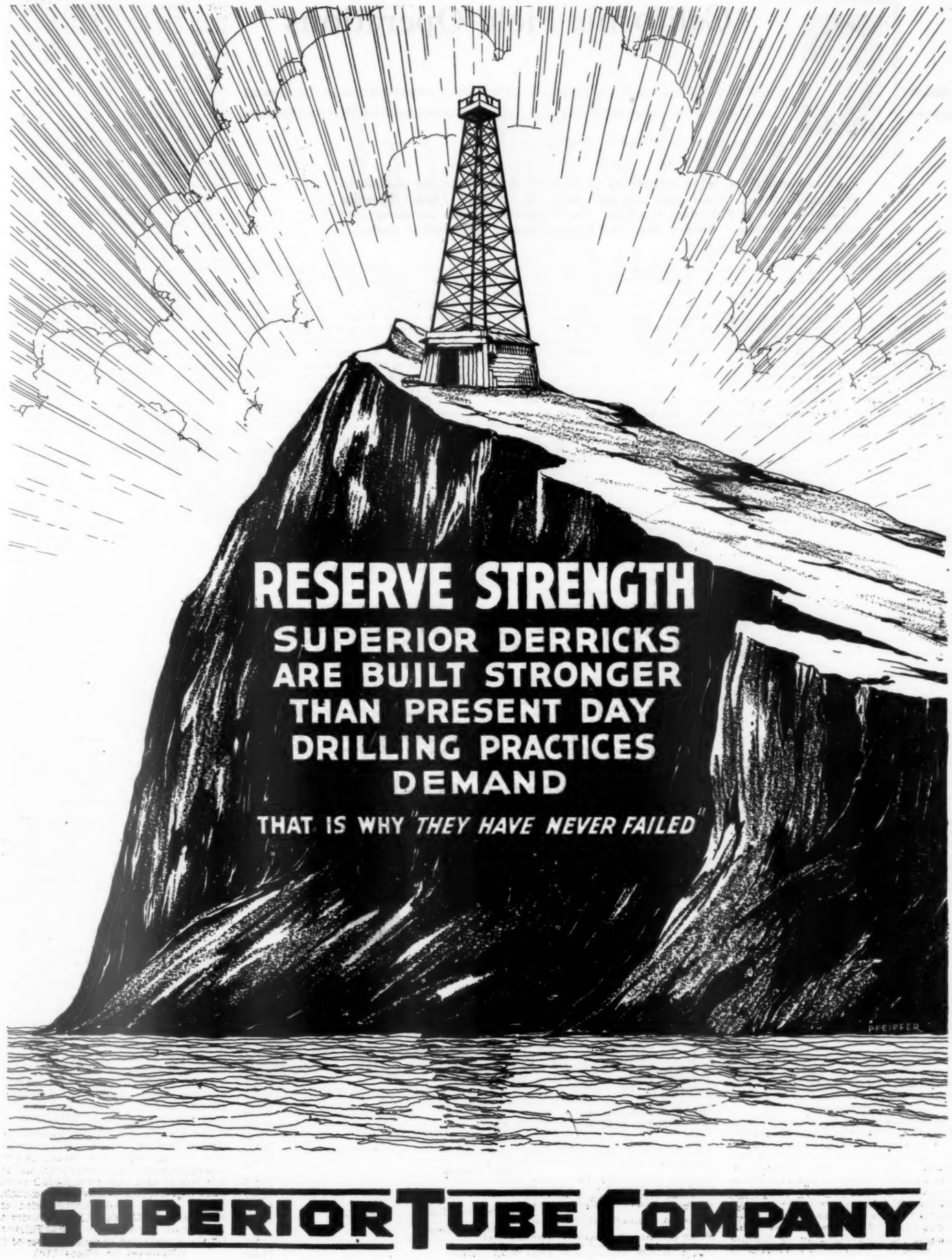
The Magnolia Petroleum Co. abandoned No. 1 Kime, its deep test in Milam County, at 3,860 feet, after bailing sulphur water. The Simms Oil-Foster & Reiter joint No. 1 Stidham was abandoned at 3,800 feet.

Texas Coastal Wildcats

Liberty (Tex.) men are rigging No. 1 Drumgoole, 9 miles east of Eagle Lake, Colorado County.

In Fort Bend County, Neilan and others have installed a heavy rig and resumed drilling No. 1, west of Rosenberg, from 1,550 feet. The Texas Co.'s No. 1 Armstrong, southwest of Needville, is drilling around 4,200 feet. The Gulf Production Co.'s No. 5 Moore, at Orchard Dome, is drilling around 2,100 feet. No. 5 at Long Point is rigging. At the Wisdom-Nash Dome, 7 miles southeast of Damon Mound, the Rycade Petroleum Corp.'s No. 2 Wisdom is fishing. No. 3 Wisdom is drilling around 1,365 feet. No. 5 Nash is at

(Continued on Page 142)



SUPERIOR TUBE COMPANY

California Field Operations

By L. P. Stockman

Fact few wells are being completed at Inglewood is reason for decline in production there. Shell gets two new wells in Torrance Field. Superior arranging test at Belvedere Gardens. Territory there looks promising and will bear watching. Miley's deep test going ahead at 7,526 feet in shale.

LOS ANGELES, Cal., Sept. 19.—The failure of operators to finish new wells was a contributing factor toward smaller production in the Inglewood Field and, in view of the limited amount of drilling being done, the number of new wells added in the future will be negligible. In the past the initial output of weekly completions more than offset the normal decline but, with only one new well added during the past seven days, the field revealed a decided downward tendency from a production standpoint. In view of the fact that only a small number of new wells can be anticipated in the upper zone, further declines in the present zone can be expected. The only successful completion added this week was the Standard's well No. 30 on Los Angeles Investment lease No. 1, which came in flowing 1,480 bbls., the oil testing 18.6 degrees and showing a cut of 3 per cent. The hole was drilled to 2,644 feet and finished with an 8¼-inch oil string and 1,890 feet of 3-inch tubing. Number 31, drilling ahead at 1,890 feet, and No. 32 at 1,707 feet, both on Los Angeles Investment lease No. 1, are potential producers but their completion is not expected within two weeks.

Operations of the Standard on Los Angeles Investment lease No. 2 are progressing slowly, as this property is only productive of small pumpers. No. 19 Vickers lease No. 1 should be the Standard's next producer as it is now in the oil sand at 2,321 feet and going ahead steadily. The company has cemented the 12½-inch in No. 2 Stocker at 1,569 feet and if the upper showings of oil and gas are any criterion as to what may be expected a little later on, the company is assured of production. Number 1 on this lease was a duster but a superior location makes No. 2 look somewhat promising. The Associated's lone driller in this area, No. 19 Vickers, is standing cement at 2,350 feet and, while it is due for completion next week, it should not have any appreciable effect on the field's output. No. 20 Vickers, the Associated's last completion, was only a 90-bbl. well and the small output secured does not make No. 19 look any too good.

Oscar Howard cemented a string of 5⅝-inch in his No. 1 Dominguez and will make a test of the showings found just above 4,900 feet. It is not believed that the well will make production in its present state. Number 2 Brown of the Brown-Shasta Oil Co., being drilled by the General Petroleum, is another well which does not look any too favorable. This hole is at present down 4,665 feet with only a few minor showings logged to date. The Petroleum Securities and Shell have just about completed their drilling program and no new development work is anticipated unless a deep sand is opened up.

Rosecrans

Regardless of how many new wells are finished at Rosecrans, the field's production does not seem to get any larger, or at least reflect these additions to any extent. This is a rather peculiar condition and the failure of new completions to materially effect the output is due to the fact that many wells develop sand trouble following completion, while others fall off miserably after being brought in, due principally to decrease gas pressure. Judging by the status of wells in the field at present, the development peak has been passed, although the Union and Barnsdall still have considerable undeveloped acreage. Other operators are having considerable difficulty in finishing wells and keeping them on production and for this reason increased output in this area should be due largely to the work of the Barnsdall and Union. The latter is still experiencing an unusual run of hard luck, with the result that a great number of its drillers on the Howard Park property are held up with mechanical trouble. The delay will probably be only temporary, however, and new wells on this lease can be expected from time to time. The Union succeeded in breaking the jinx this week by bringing in a new well, No. 2 Chandler. It was drilled to 4,578 feet and, while it only made a small flow the first day, it has since built up to 2,700 bbls., the oil testing 36.7 degrees and showing a cut of 3 per cent. Just how long this big output will be kept up remains to be seen but if the well runs true to form it will register a substantial decline within the next two weeks.

Wanka Zone Producer

During the past seven days the Associated finished another well in the Wanka zone after redrilling and deepening it from the upper horizon. The company's latest completion is No. 1 Higgins, deepened to 4,798 feet and finished with a 3½-inch liner carrying 246 feet of 120-inch screen. This deepening job resulted in increased production, the present output being 1,606 bbls. of 41.2 gravity oil. Number 1 Dixon, of the Mohawk, was another work-over but the results attained were rather unsatisfactory, as the output, 150 bbls. a day, is cutting 25 per cent water. This hole was drilled to 5,221 feet and finished with a 4½-inch oil string carrying 182 feet of 100 mesh screen. Number 5 Maxwell of the Superior was a small flowing well brought in from 4,920 feet after being finished with a 6¼-inch oil string carrying 185 feet of 100-mesh screen. Flowing through a one-half inch beam under a pressure of 300 pounds, it tanked 135 bbls. of clean 38.8 gravity oil during the first 24 hours. The Superior has deepened No. 1 Maxwell to 4,618 feet and will run in a string of 6¼-inch and try for production at this depth within the next few days.

Number 2 Kreitz of the California Petroleum was a distinct disappointment, the company being obliged to put it on the beam instead of securing a natural flow as was anticipated. Number 1 Kreitz was a big well and the company had hopes of duplicating its performance in view of the fact that No. 1 Walsh, of the St. Helens, an offset, came in only recently as a large producer. Number 2, however, was only good for 60 bbls. a day, the oil testing 33.7 degrees and showing a cut of 1 per cent. The hole was drilled to 4,355 feet and finished with a 4¾-inch oil string, carrying 155 feet of 60-mesh screen and 3,621 feet of 2½-inch tubing. Number 3 Kreitz is in a shale and oil sand at 4,388 feet and the company is reaming preparatory to landing a string of 6¼-inch. The Chanslor-Canfield Oil Co. recovered from a rather difficult fishing job and is again going ahead in No. 1 Bilhorn, an outpost at 5,900 feet. This hole has yet to pick up its first favorable showing and for this reason looks rather discouraging. The Painted Hills Oil Co. cored a fairly promising looking sand at 5,190 feet and the company has hopes that the sand will increase in thickness. E. J. Miley's No. 6 Athens, a deep test, is going ahead in a brown shale streaked with oil sand at 7,526 feet and, while it looks fairly good, it is problematical whether Miley will secure commercial production from this extreme depth. The Twin State Oil Co. has suspended operations on both No. 1 Hofferkamp at 4,945 feet and No. 1 Green at 3,022 feet, pending field developments.

Torrance

The Shell added two new wells to its producing list at Torrance by bringing in No. 4 Frenger and No. 5 Redondo Community, both pumpers. The former was drilled to 3,595 feet and finished with a 6¼-inch oil string carrying 400 feet of shop perforated, while the latter was carried to 3,600 feet and finished with a 6¼-inch oil string carrying 465 feet of 60-mesh screen. No. 4 Frenger pumped 115 bbls. of 16.2 gravity oil, while No. 5 Redondo was good for 77 bbls. of 15.6 gravity oil. The Shell has two other drillers in this field at present, No. 5 Torrance at 3,156 feet and No. 7 on the same lease at 2,230 feet. The Marine Oil Corp. cleaned out its No. 52 Torrance and returned it to production pumping 40 bbls. a day, the oil testing 17.1 degrees.

The Chanslor-Canfield Midway Oil Co. lists six wells on its drilling chart, the most promising of which is No. 33 Del Amo at 3,720 feet. A 6¼-inch oil string has already been run in and the well should be bailed some time during the coming week. W. E. Garner of Long Beach has secured several leases at Torrance and will attempt to develop shallow production, which he estimates should be found around 700 feet. This tar zone he believes is comparable to that found in the Newport section and it is his intention to start operations before the close of the current month. This sand has never really been tested out as operators passed it up in the early stages of development.

The Marland's deep test at Dominguez, No. 7, has just passed the 6,280-foot level but the company has not yet shown any inclination to suspend drilling. It was the intention of the Marland when the hole was started to go to 7,000 feet if necessary and it looks as though the company's intention will be realized. The Shell's two drillers in this field, No. 27 A. Reyes, at 3,960 feet, and No. 30 Reyes at 3,617 feet, are in good mechanical condition and they should be tanking oil within the next 60 ways as both are in proven territory. The Union cored some splendid oil sand in No. 12 Callender at 4,752 feet but drilling was resumed and the bit is now at 4,774 feet. No. 13 Callender, the company's latest spud, is down 1,190 feet.

The General Petroleum finished a shallow but nevertheless satisfactory completion in the Long Beach Field when No. 6 K. & H. was given a test at 3,398 feet. The well came in flowing 285 bbls. of 24.6 gravity oil cutting 2 per cent. No. 2-A Bixby, of the United, was given a production test during the early part of the week but the output, 300 bbls., is cutting about 50 per cent water. The hole was drilled to 4,430 feet but plugged back to 4,398 feet, from which depth the production is coming. Unless caution is used, some of the wells drilling out on American Avenue in the northwestern part of the field will be edge wells instead of commercial producers. The limits cannot be extended indefinitely and as soon as the edge is struck several operators will be hit at once. The Repetto Hills Oil Co. is erecting a new rig in this area and will undoubtedly spud in within the next two or three weeks.

Huntington Beach

King C. Gillette has leased up considerable acreage in the eastern part of Huntington Beach and it is understood that he contemplates drilling in the southwestern part of his holdings within 60 days. The California Petroleum is abandoning No. 1 Witte, a deep test at Rideout Heights carried down to 4,682 feet but later plugged back to 870 feet. The rig is being skidded to a new location where a shallow hole will be drilled. The company's No. 2 Hamburg is going ahead in a hard sand at 1,215 feet. The Standard encountered a hard formation at 4,990 feet in No. 62 Baldwin, a deep test at Montebello, and as a result is going ahead rather slowly. No. 2 Mulholland of the St. Helens is held up with a fishing job at 4,140 feet, resulting from the loss of several stands of drill, pipe. The Union is still held up with mechanical trouble in its Fullerton wildcat No. 1 Olinda, but has just drilled out the cement in its No. 2 Olinda, another test well in this area, and is preparing to go ahead at 2,741 feet.

The Brea Canyon Oil Co. successfully plugged back its No. 37, which came in as a flowing well a few weeks ago but subsequently developed water trouble. The hole was bridged back from 4,682 feet to 4,525 feet, the plug successfully excluding bottom water. Upon recompletion the well tanked 1,092 bbls. of 25.2 gravity oil which cuts 3 per cent. The Fullerton Oil Co. is preparing to make a test of its

(Continued on Page 116)

TANKER SHIPMENTS FROM LOS ANGELES TO ATLANTIC AND GULF COAST PORTS

Following is a list of tankers, date departed, destination, kind of cargo and amount in barrels:

Samuel Q. Brown, September 11, New York, crude	74,750
Agwisemith, September 12, New York, crude	110,509
Coastwise	
D. G. Scofield, September 7, Seattle, fuel	77,401
W. S. Miller, September 8, Richmond, crude	74,001
Los Angeles, September 8, Martinez, crude	74,157
Lebec, September 9, Seattle, fuel	65,981
El Segundo, September 10, Point Wells, refined	29,678
K. R. Kingsbury, September 10, Richmond, crude	84,096
Richmond, September 11, Portland, fuel	64,897
Solana, September 11, Avon, crude	60,708
Deroche, September 11, Martinez, crude	75,047
Los Alamos, September 11, San Francisco, refined	40,593
Emidio, September 11, Seattle, refined	70,844
W. S. Miller, September 12, Richmond, crude	73,997
Wm. F. Herrin, September 13, Avon, crude	48,072
Exports	
Huguenot, September 9, Chile, fuel	75,843
Mina Brea (Br.), September 10, Vancouver, crude	42,339
Argyll (Fr.), September 10, Santa Rosalia, fuel	30,424
From Ventura	
Frank H. Buck, September 7, Avon, crude	63,059
Paul Shoup, September 8, Avon, crude	78,460
Tulsagas, September 11, Avon, crude	74,161
Oleum, September 13, Martinez, crude	84,018
From Fort San Luis	
Cathwood, September 11, Oleum, crude	78,471
From San Francisco	
Frank G. Drum, September 7, Portland, fuel	73,859
Yorba Linda, September 7, Seattle, fuel	73,447
Charlie Watson, September 10, Point Wells, refined	16,046

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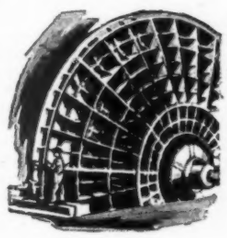

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POUNDS OR TONS DODGE CAN BUILD IT

Rocky Mountain Area

By F. B. Taylor

Kinney Coastal Co.'s wildcat finds gas in Frontier sands in wildcat on Dry Creek Dome. Mammoth Oil Co. completes third Wall Creek producer in northern part of Teapot Dome, first operation since lease proceedings, offsetting Prairie well. Continental's test, Salt Creek, at 3,229 feet, no showing.

CASPER, Wyo., Sept. 19.—The Kinney Coastal Oil Co. found gas in the Frontier sands on the Dry Creek Dome in Fremont County, at 715 feet, in Section 27-6-3. This is a wildcat well, the second one drilled on this structure, and the first well proved dry.

The well is estimated good for 5,000,000 feet, but some conjecture is apparent as to the quantity of the flow on account of the shallow depth. The Frontier sands are found in the central part of the Cretaceous strata and as the western part of Wyoming contains these sands in much greater thickness than in the central and eastern parts, further drilling in the vicinity of the Kinney Coastal well may develop a production of oil or gas in these sands. The Frontier sands were brought by the prehistoric ocean currents from the erosion of the mountain ranges along the Pacific Coast. As the currents that brought these sands lost their momentum the sand particles dropped to the bottom and in time became the rock we call the oil sands of today. In Salt Creek Field these sands are oil bearing in large quantity, but, through the tendency to thin out, there are only three strata or layers, while in Fremont County, farther west, there are six definite Frontier layers of sands.

The Dry Creek structure lies in the Wind River Valley, on the Shoshone Indian reservation. It is an ideal country to operate in for oil, though the winters are so cold this phase interferes with field work. The Pilot Butte and Maverick Springs fields are the only two commercial operations active at present. The Maverick Springs Field is a black oil field that has no pipe line because of the low demand for this grade of crude, but the Pilot Butte Field has a pipe line outlet to Riverton, and this last operation produces a good grade of light oil. Several other drilling operations have developed gas or oil showings in that area, but nothing commercial as yet.

When the gas was struck in the Kinney Coastal well, the flow caught fire and destroyed the derrick.

Green River Shale Plant

A shale plant being constructed at Green River, to operate on the oil shales of that district, is to be placed in operation in the near future, according to the promoters of the enterprise. Green River is a town in the southwest part of Wyoming and the shale plant is located on the outskirts. The promoters state that gasoline from shale oil will soon be placed on sale there.

La Barge Pipe Line

In the La Barge Field, in Lincoln County, the operators there are talking over the visit to the field recently of L. C. Clark and A. D. Hoskins, of the Producers & Refiners Corp. Their examination of the field is considered as having a possible bearing on a pipe line from the field to the railroad, which would be laid by the Prairie Oil & Gas Co. of Wyoming. The Prairie controls the Producers & Refiners and the latter corporation owns the big refinery at Parco. A pipe line from the La Barge Field to the Union Pacific Railroad would make the Parco refinery the nearest refining point for shipment of crude from the La Barge Field. Discounting the enthusiastic figures of many owners of production in La Barge, that field has a production of about 250 bbls. per day of high-grade oil.

Mule Creek Suspends

No more oil shipments will be made from the Mule Creek Field this year, pipe line operation having been suspended for the winter. For the past three or four years the Mule Creek line has been idle during the winter months, due partly to the difficulty of shipping the crude in cold weather, and partly to market conditions. At present there is little demand for the Mule Creek oil, which no doubt influenced the operators to shut down earlier than usual. The Ohio Oil Co. and the Argo Oil Co. (Western States) are the principal operating companies in the Mule Creek Field. It is understood the wells will be pumped for several weeks and the crude run into storage.

The annual report of the Frantz Corp., recently filed, shows a net profit of $686,153.82, while the total volume of business for the year was $1,044,513.58. The principal operations of the company are carried on in the Cat Creek Field in Montana, the Continental Oil Co. having taken over the Frantz properties in the Salt Creek district.

Teapot Completion

The Mammoth Oil Co. brought in a third Wall Creek sand well last week in the northern part of the Teapot Field. This is the first drilling operation on the Teapot since the early days of the Sinclair-Government controversy. Recently the Prairie Oil & Gas Co. completed a third Wall Creek sand well in Section 20-39-78; this offset a second sand producer on the Mammoth acreage, which at that time was making only about 3 bbls. a day. Following the completion of the Prairie well, the Mammoth obtained permission from the receivers to deepen its offsetting well to same sand. Permission was granted, and the well was drilled to the third Wall Creek, which was topped at 2,873 feet. The hole is now bottomed at 2,881 feet. During the first 24 hours the well made 117 bbls., increasing to 127 on the second day, and reaching 179 bbls. on the fourth day. According to reports from the field, the production is still increasing. The completion of these two wells will no doubt lead to the further development of the third Wall Creek sand in the southern part of the Salt Creek Field and the north end of the Teapot. This is the only part of the field in which the third Wall Creek has been found commercially productive.

Salt Creek Completions

The Midwest Refining Co. reports the following completions on acreage of affiliated companies:

Salt Creek Consolidated's No. 21-A, Section 3-39-79, completed and shot in the second Wall Creek sand, no production figures available; Wyoming Associated's No. 33-A, Section 34-40-79, completed and shot at 1,766 feet; Wyoming Associated's No. 3, Section 35-40-79, completed at 1,063 feet; Midwest Oil Co.'s No. 18-A, Section 25-40-79, 50 bbls. at 1,117 feet; Wyoming Associated's No. 1-A, Section 23-40-79, completed at 1,445 feet; Wyoming Associated's No. 2-A, in the same section, completed and shot at 1,220 feet; Wyoming Associated and Midwest Oil Co.'s No. 6-A, Section 25-40-79, completed at 1,596 feet with a 60-bbl. production.

The deep test of the Continental Oil Co. in the Salt Creek Field has reached a depth of 3,229 feet, and at last report was working in shale with nothing of interest to report. The operators are not entirely certain of the last sand penetrated, which at the time was thought to be the Sundance. No completions were reported by the Continental for the week. The Marine Oil Co., now operating as the Argo Oil Co., drilled into the sand in its No. 9, Section 17-39-78, and shot the well. A production test will be made as soon as the hole is cleaned out. The same company's No. 3 Taylor, Section 20-39-78, is being deepened, and may be carried to the third Wall Creek sand, which was found productive in that section by the Prairie and the Mammoth.

The Producers & Refiners Corp. has taken over the holdings and operations of the Hatfield interests on the Eight Mile Lake structure near Rawlins. The Hatfield interests developed commercial gas production on the structure, and the Producers & Refiners has been utilizing this at its Parco refinery. The new operators will complete two wells which have been standing above the sand for some weeks, and has spudded in on a third hole. The Producers & Refiners spudded in a test well last week on Sugar Creek, 4 miles north of Parco. This is the first well on the structure, and is located in Section 34-22-86. A second test has been started at Clay Basin, in Section 22-3-24. The Producers & Refiners drilled its first well on the structure to a depth of 4,000 feet, and then abandoned the hole. Well No. 11 on the Simpson Ridge Dome is ready to spud; this is a shallow sand operation which has afforded several producing wells.

Powder River

The Midwest Refining Co.'s well at Powder River passed through the Lakota sand at 2,570 feet, without encountering oil. As soon as a heavy water flow is shut off, the well will be carried to the Sundance. The Dutton Creek test of the same company, located on Argo Oil Co. holdings, in the southern part of the State, has reached a depth of 3,700 feet, without encountering anything of interest since the uncorking of a small gas flow at 1,600 feet.

The Marland Oil Co. spudded in this week on a test well on the Wilson Dome in northern Natrona County. The well is located between the North Casper Creek Dome, where a test found both oil and water, and the Notches Dome, which is a proven black oil structure. The new test is located on the southwest quarter of Section 32-38-83.

The Duthie Oil Co. recently took over a block of acreage in the old Moorcroft Field, in the northeastern part of the State, and has inaugurated a rehabilitation program. The old wells are being cleaned out and brought back to production, and one new hole has been spudded in. The Duthie interests have installed pumps, and the production of the field will be put on the market.

The Wyotah Oil Co. is drilling in its fourth well in the La Barge Field, in the Kemmerer district, and appears to have another producer. The two wells recently drilled into production on Wyotah holdings have filled all available storage, and are still making flows when the caps are disturbed. One of these wells was drilled with a standard rig, and intended for a deep test. It will probably be carried deeper. The Elkhorn Oil Co. well, 2 miles farther north, found the sands considerably deeper than in the Wyotah wells, the bit having just entered the Frontier formation at something over 1,400 feet. This well should be an early completion. The La Barge Field lies 40 miles from a railroad, and its location has retarded development work greatly. Several fields in that part of the State have been proved productive, but the

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News from Fields of Canada

By Victor Lauriston

CHATHAM, Ont., Sept. 19.—Official figures show that the crude oil production of the Canadian fields is still declining. The crude oil output for 1924 amounted to 160,773 bbls., valued at $467,400, compared with a production of 170,169 bbls., valued at $522,018 for 1923. Most of this production came from the various shallow pools in Southwestern Ontario. For 1925 the production of these areas, owing to the discontinuance of the crude petroleum bounty, is expected to show a marked decline; though this will to some extent be offset by the light oil production in the Turner Valley Field of Southern Alberta.

In the Canadian West, Imperial Oil, Ltd. Dead Horse Coulee No. 2, Section 32-1-1w4, which showed colors of oil in a sand at 2,360 feet, failed on further test to develop production. According to T. Draper, western production manager, the core which was taken of the sand between 2,350 and 2,360 feet showed signs of oil. The water and mud were bailed out of the well and a test of the sand made, but all the drillers got was a little scum of oil on the water and a little gas. All the mud and water were bailed out of the hole, and subsequently some water came in; but whether from the back of the casing or the bottom of the hole was not determined, there being a possibility of a little salt water in the bottom of the hole. The show was slated to be in the Sunburst sand, estimated to be about 125 feet above the Ellis sand. The test has resumed drilling, and is reported down 2,425 feet, the crew drilling and coring, with no trace of oil. The drilling will be continued to the Madison limestone, and perhaps into that formation.

Near Coutts, the Urban Oils, Ltd. Moodie well, Section 4-1-15w4 is reported drilling at 2,200 feet.

In the Willow Creek Field, west of Nanton, in the southern foothills, the Imperial Oil, Ltd. test at Rice Creek is down 2,175 feet and drilling and underreaming to carry down 10-inch casing, which is now down 2,155 feet.

Sweetgrass Field

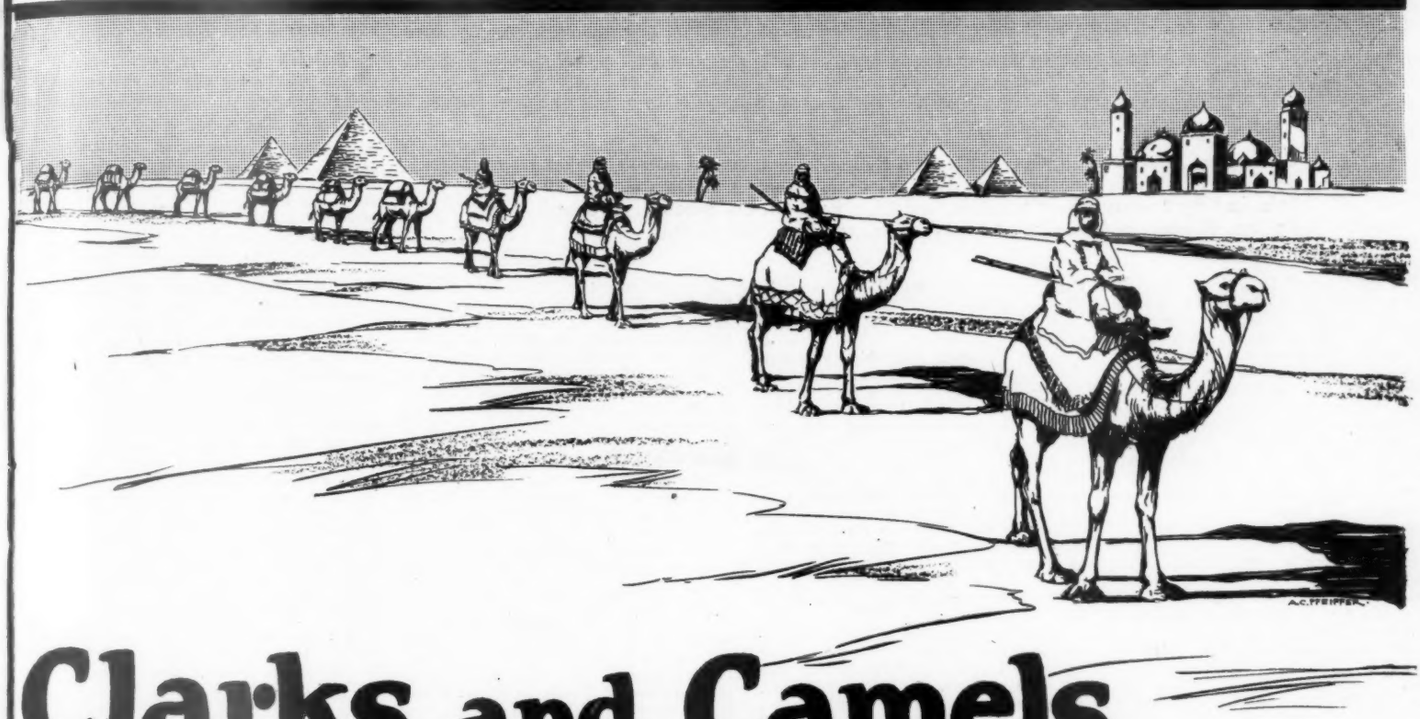
In the Sweetgrass Field, the Imperial Oil, Ltd. Erickson Coulee, Section 8-1-11w4, 6 miles southwest of Dead Horse Coulee No. 2, is still hauling material for the rotary outfit.

In the northern foothills, due west of Edmonton, Imperial Oil, Ltd. Coalspur No. 2 is down 3,767 feet and drilling and underreaming to carry down 6-inch casing which is now down 3,720 feet.

In the Turner Valley Field, southwest of Calgary, Royalite Oil Co. No. 5 is down 1,915 feet, with a rotary outfit; 12½-inch casing was set at 1,544 feet. Royalite No. 6 has a difficult fishing job at 1,210 feet. In the same field the Mc-

(Continued on Page 120)

ON POCKETBOOK AND WATER BARREL



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S ENGINES

Pennsylvania-West Virginia

By D. S. Wakenight

Consumers Fuel Co. well, Greene County, Pennsylvania, drilled deeper, makes 665 bbls. in 24 hours, declining to 275. Virginia Gasoline & Oil Co. gets 50 bbls. in Clay County, West Virginia, and Ohio Fuel Oil Co. another. Leonard Co. has 65 bbls. in Coshocton County, Ohio, and Pure Oil 55 bbls.

PITTSBURGH, Pa., Sept. 21.—The Southwest Pennsylvania fields again got into the spotlight during the past week. When the Consumers Fuel Co. drilled its test on the Thomas Anderson farm, in Morris Township, Greene County, a little deeper and developed a second pay its production was increased to 665 bbls. the ensuing 24 hours. It had an initial production of 410 bbls. when drilled into the first pay in the Gordon sand. The well on the Rutan farm was drilled a little deeper and its production increased to 225 bbls.

Neither West Virginia nor southeast Ohio completed any large wells. Two 50-bbl. producers in Henry district, Clay County, were the best offering in the West Virginia fields. The outlook is favorable for a Big Injun sand pool in that district. Kanawha County completed quite a number of gas wells on town lots at Pratt in Cabin Creek district.

Fair Producers in Clay County

The Virginia Gasoline & Oil Co. has drilled No. 4 on the J. B. Casto 260 acres into the Big Injun sand and showing for a 50-bbl. producer. The location is 600 feet south of No. 3 on the same tract. In the same district, the Ohio Fuel Oil Co. completed a second test on the J. B. Casto 220 acres and have a 50-bbl. producer. In the same locality, the South Penn Oil Co. is due in the sand at a second test on the O. D. Stockly farm.

On Laurel Run, Murphy district, Ritchie County, E. E. Pope has drilled down from the salt sand to the Big Injun, his old No. 1 well on the C. W. Kemp farm. It is dry in the Big Injun sand and will again be put to pumping from the salt sand. In the same locality, the South Penn Oil Co. has drilled deeper its old No. 1 on the Georgia M. Haught farm and is a light pumper. On Bear Run, same district, the Hope Construction & Refining Co. has drilled through the Berea grit its test on the John Lanager farm. It is dry in the Berea, but will make a light pumper from the salt sand.

Shot Increased Production

In West Union district, Doddridge County, the Clifton Oil & Gas Co.'s No. 7 on the Flora Freeman farm, completed last week, was given a 15-quart shot in the Big Injun sand and its production increased from 20 to 90 bbls. a day. On Meadow Run, Grant district, Ritchie County, the Meadow Run Oil Co. completed and shot in the Big Injun sand a test on the Bowie heirs' farm and good for 45 bbls. a day. On Louthers Run, Murphy district, F. Donaghy and others completed in the Maxon sand a test on the John Twyman farm. It is a natural producer good for 6 bbls. a day.

On Nutter's Fork, 1,400 feet west of production, Anderson, Wilcox & Co. have completed a test on the Austin Dickey farm. It is a small gas well in the Big Injun sand. In Clay district, Wirt County, the Carnegie Natural Gas Co. has a gasser in the salt sand at No. 3 on the E. S. Lough farm.

Good Gasser in Marshall County

In Union district, Marshall County, the Otto Oil Co.'s test on the R. J. Otto farm is a gasser good for 6,000,000 feet in the Maxon sand. In Liberty district, Marshall County, the Lynn Camp Oil Co. has drilled a test on the Thomas Blake farm into the Gordon sand, and the hole filled up 700 feet with fluid.

In Washington Township, Pleasants County, West Virginia, H. P. Gallaher and others have completed in the Cow Run sand a test on the C. C. Schanwecker farm good for 4 bbls. a day. The location is slightly in advance of production. In McClelland district, Doddridge County, Trainer & Ash have drilled down from the Big Injun to the Gordon sand a test on the M. E. Ash farm. It is dry in the Big Injun and Gordon sands. It will be abandoned. Near Metz, Mannington district, Marion County, the Clifton Oil & Gas Co.'s test on the Belle Snider farm is now through the fifth sand and dry.

In Lafayette district, Pleasants County, the Wiser Oil Co. is through the Big Injun sand at a test on the Robert Wilson farm and dry. In Union Township, Tyler County, the Sanders Oil Co.'s No. 7 on the A. R. Williamson farm is dry and abandoned. In Burning Springs district, Wirt County, M. Richter has drilled an old well on the H. F. Pell farm to the Big Injun sand. It is a gasser in the lower formation.

Gassers in Kanawha County

In the town of Pratt, Cabin Creek district, Kanawha County, the following wells have been completed with volume of gas appended: Ohio Fuel Oil Co., No. 1 C. A. Veasy lot, 250,000 feet; Earle Cameron, O. A. Veasey lot, 1,000,000 feet; Mullins Gas Co., O. A. Veasey lot, 800,000 feet; Veasey Fuel Co., O. A. Veasey, 500,000 feet; C. S. Halstead, John Nugent, 300,000 feet; Fincastle Oil & Gas Co., Hezekiah Ferrell, 1,500,000 feet, and S. W. Vanhorn, 200,000 feet. Total, 4,610,000 feet. All are located on town lots within the corporate limits of Pratt. The gas is produced from the Weir sand.

Duster in Marion County

In Mannington district, Marion County, the Clifton Oil & Gas Co.'s test on the Belle Snider farm is now through all sands and is dry and abandoned. In New Milton district, Doddridge County, the Hope Natural Gas Co.'s test on the Grace Nicholson farm is dry in the Gordon sand and abandoned. The Grant Gas Co.'s test on the John S. Burdette farm, in Curry district, Putnam County, is a gasser in the salt sand. In the same district the same company has a gasser in the Big Injun sand on the Harvey Ashworth farm. In Dunal district, Lincoln County, Ray & Osborne's second test on the F. E. May farm is a gasser in the Big Injun sand. In Sheridan district, Calhoun County, the Chemical Oil Co. has a show of oil and gas in the Big Injun sand at No. 3 on the D. M. Miller farm. The same company has a rig up on the Bennett-Sanders farm.

Drilling for Gas

In Duval district, Lincoln County, the Grant Gas Co. has started to drill for gas a test on the J. R. McCallister farm. In Jefferson district, the Carter Oil Co. is rigging up on the Charles Stowers farm. The Cambridge Gas Co. has drilled through the Berea grit and waiting for a shot at a test on the Henry Linville farm.

In Central district, Doddridge County, Nay & Kintzer have rig material at a location on the C. Williams farm. In West Union district, the Carter Oil Co. has started to drill on the R. McKinney farm. In Sheridan district, Calhoun County, the Hope Natural Gas Co. has the road completed to a location on the G. W. Dye farm. In DeKalb district, Gilmer County, Clem Morris & Co. have started to drill on the Margaret Barker farm and shut down for water. In the same district, J. N. Stephens & Co. have rig material at a location on the P. A. Beall farm. S. G. Roberts & Co. are rigging up on the Albert S. Beall farm.

Ritchie County Gassers

H. L. Lambert's test on the John Pointer farm in Clay district, Ritchie County, is a gasser in the Big Injun sand. In Murphy district, the Leroy Oil Co. has a gasser in the same formation at No. 3 on the Jacob Cunningham farm. In the same district, Pope Brothers' second test on the C. W. Kemp farm, an old well drilled deeper, is a duster in the lower sands. It will be filled up and again put to pumping from the Maxon sand. The Hope Natural Gas Co.'s test on the J. H. Linniger farm is dry in the Berea grit. A little oil was developed in the Maxon sand.

On Buff Lick Run, Big Sandy district, Kanawha County, the Buff Lick Oil & Gas Co. completed in the Big Injun sand its test on the W. W. Bird heirs' farm. It is a gasser good for 500,000 feet. In West Union district, Doddridge County, C. H. Pigott's second test on the Benjamin Heflin farm has now been drilled through the Big Injun sand and good for 12 bbls. a day.

Small Pumper in Marion County

In Mannington district, Marion County, the South Penn Oil Co. completed its test on the Miller Tennant farm, good for 5 bbls. a day in the Big Injun sand. In Walker district, Wood County, the same company has the same kind of a pumper in the Berea grit at No. 16 on the Sudan Grant farm.

Dry in the Fifth Sand

In Skin Creek district, Lewis County, the Carnegie Natural Gas Co.'s test on the Fronie Rittenhouse farm is through the fifth sand and dry. In the same district, the same company's test on the Rose Davis farm is a gasser in the fifth sand. In Mannington district, Marion County, the same company has a fifth sand gasser at a test on the J. E. Michael farm.

The Cairo Oil Co. completed a test on its own tract, on the Left Fork of Straight Creek, Burning Springs district, Wirt County. It is good for 7 bbls. a day in the Maxon sand. In Williams district, Wood County, in the old Plum Run Pool, Mallory & Ekas drilled a test on the J. R. Uhl farm through the first Cow Run sand, not good for more than 2 bbls. a day.

Week-End Completions

West Virginia did no better at the close of the week than the Southeastern Ohio fields. In Sheridan district, Calhoun County, the Hope Natural Gas Co.'s test on the W. R. Bush farm is showing light in the Big Injun sand. In the same district, the Chemical Oil Co.'s No. 3 on the D. M. Miller farm has a light show of oil and gas in the same formation. The Pittsburgh & West Virginia Gas Co.'s second test on the Amos Glover farm is a very light pumper in the fourth sand. In the same district, the Hope Natural Gas Co. had the same luck at a test on the W. M. Miller farm.

Gilmer County

The Carnegie Natural Gas Co.'s test on the J. P. Price farm in DeKalb district, Gilmer County, is now through the Gordon sand and dry. In Center district, the McCall Oil & Gas Co.'s test on the Rosie Wilson farm, an old well drilled down, is dry in the Big Injun sand. In the same district, the Leroy Oil Co.'s No. 3 on the Valeria Gerwig farm is a gasser in the Big Injun sand.

In Logan district, Logan County, the Wacatock Oil & Gas Co.'s test on the Martha Chambers farm is a fair gasser in the Berea grit. In the same district, the South Penn Oil Co. has a gasser in the same formation good for 1,500,000 feet. On Bushy Fork, Reedy district, Roane County, the Heck Oil Co. has the rig completed for a second test on the D. H. Burroughs farm. The same company has the rig completed for a second test on the Stewart heirs' farm.

Putnam County

On Poplar Fork, Scott district, Putnam County, 400 feet northwest of the test on the H. H. Pine farm, W. H. Kirtley & Co. completed No. 3 on the J. S. Frazier farm, good for 13 bbls. a day in the salt sand. On the same stream and same district, A. J. Dalton and others completed in the same formation a test on the H. R. Alexander farm. It is a very light pumper. One-half mile southeast of the first test on the H. H. Pine farm, the Mid-South Oil & Gas Co. has the rig completed and started to drill a test on the John White farm. Inside the corporate limits of Scott, Trowbridge & Massey have started to drill on the V. M. Meddings lot.

More Trouble at Deep Test

The Reserve Gas Co. is meeting with more trouble at its deep test on the Smith Brothers farm in Union district, Harrison County. Another pocket of gas was encountered at a depth of 6,734 feet and blew the tools up in the hole and broke the wire cable, leaving part of it and the tools in the hole. They are now getting ready to fish for the tools, and hope to be able to recover them. Up to within the past few weeks they have had very good luck at this well.

Tests Due and Starting

In Mannington district, Marion County, the Clifton Oil Co. is due in the fifth sand at a test on the Belle Snider farm. In the same district, the Maxon Oil Co. has drilled No. 4 on the J. H. Baker farm to a total depth of 3,346 feet and shut down for orders. In Union district, Wood County, Bennett & Earle are building a rig on the Dare-Carney farm. In Walker district, Jonas & Parks are building a rig on the Ewing heirs' farm. Neeley & Co. are due in the sand at a test on the Charles and Rebecca Delong farm, in McKim district, Pleasants County. In Union district, Tyler County, the Williamson Oil Co. is building a rig on the Ada V. Parker farm. In Murphy district, Ritchie County, the Continental Oil Co. has a rig up on the John L. Lowther farm. In the same district, Deem Brothers have a rig up on the D. B. Bush farm.

Lower Counties

In Carroll district, Lincoln County, the Maul Rock Oil & Gas Co. has rigged up at a test on the Martha Hicks farm. In Barboursville district, Cabell County, Ortman & Shipe are rigging up on the A. J. Bumgardner farm. In Washington district, Calhoun County, the Hope Natural Gas Co. has made locations on the S. P. Bell and Lottie McEndree farms. In Simpson district, Harrison County, the Vesper Oil Co. has started to drill on the Cletus Stout farm. In Magnolia district, Wetzel County, the Silver Hill Oil Co. has a rig up on the A. E. Riggenbauch farm. In Proctor district, J. O. Shrader has started to drill on the Nathaniel Williams farm.

In Union district, Ritchie County, the Pittsburgh & West Virginia Gas Co. has the rig completed for a test on the

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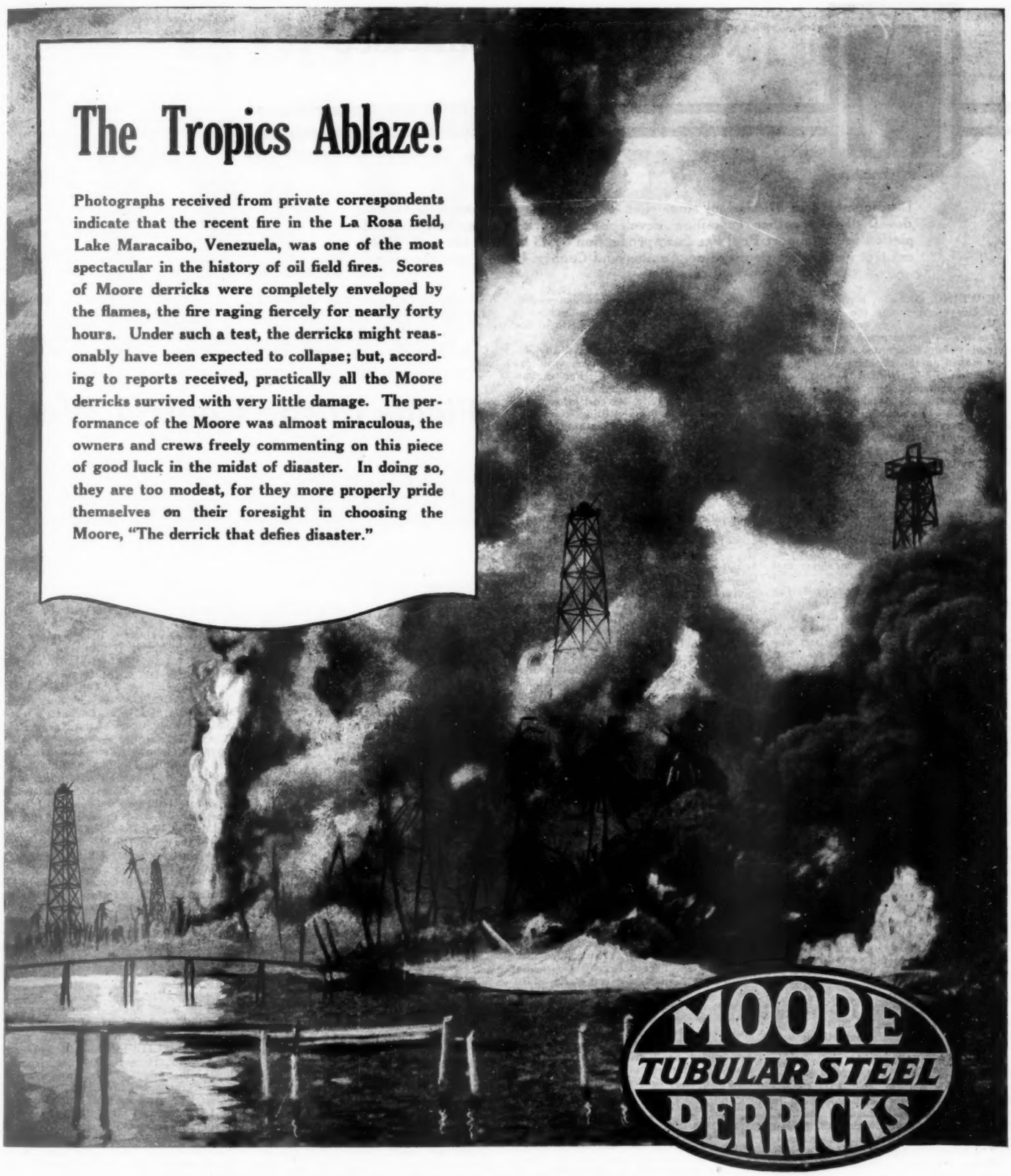
The Tropics Ablaze!
Photographs received from private correspondents indicate that the recent fire in the La Rosa field, Lake Maracaibo, Venezuela, was one of the most spectacular in the history of oil field fires. Scores of Moore derricks were completely enveloped by the flames, the fire raging fiercely for nearly forty hours. Under such a test, the derricks might reasonably have been expected to collapse; but, according to reports received, practically all the Moore derricks survived with very little damage. The performance of the Moore was almost miraculous, the owners and crews freely commenting on this piece of good luck in the midst of disaster. In doing so, they are too modest, for they more properly pride themselves on their foresight in choosing the Moore, "The derrick that defies disaster."
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Kentucky—Tennessee

By Vern T. Whitney

Developments in Mississippi somewhat disappointing with many tests shut down. Dry weather curtailing development work in Kentucky. Completion in Davenport Pool has flush production of 48 bbls. at 550 feet. Wildcat test near Adair County line, Cumberland County, has big gas showing.

BOWLING, GREEN, Ky., Sept. 21.—Recent developments in the oil situation in Mississippi have been quite disappointing so far as the bringing in of a commercial well is concerned. Great hopes were staked on the Finkbine No. 2 well, in Section 7-3-3, Rankin County, and while the showings were most encouraging, water troubles developed which up to this date have not been overcome. The men in charge have used various methods to surmount this difficulty, are still at work on the problem and seem to be confident that they will be able to develop a good oil well of high gravity. Whether or not this well ever becomes a commercial producer, one salient fact has been proven, and that is, that there is oil of an unusual high gravity under Mississippi soil. It being brought to the surface, sooner or later, depends on persistent exploration by competent and strongly financed companies.

In this test, three distinct producing sands were penetrated. One at between 1,100 and 1,200 feet carrying a very rich sand that was saturated with low grade crude. Another oil and gas horizon was passed through at from 2,000 to 2,900 feet. Competent observers were all of the opinion that a good well could have been made in this stratum. The bottom of the hole is a little below 3,500 feet where the largest flow ever seen in this State came to the surface, not in gallons, but in barrel quantities, according to R. S. Withers.

Another Disappointment

The Bill Young well at Port Gibson, Section 5-11-2, Claiborne County, is somewhat of a disappointment. This test is less than 500 feet from the city well in which Mr. Young found a rich oil sand many years ago. The log of the present well differs widely from that of the city water well and the failure to pick up the oil sand at the expected depth is a puzzle to the drillers. It looks as though there may be a fault in the formation between the old well and the new one. While the owners of this venture are somewhat disappointed it is their intention to drill on down to the 2,000-foot level before giving up hope. If it proves to be a duster it is probable that another test will be put down on a location nearby.

Work on the Insane Hospital test, north of Jackson, Section 25-6-1, Hinds County, has been at a standstill for over two months. It is currently reported that after reaching a depth of about 2,000 feet funds ran short and the plucky promoter of this venture, Mrs. Ella Rowels Reeder, left for the North and East in search of additional financial backing. Parties in close touch with Mrs. Reeder say that she will return to Jackson shortly and prosecute her oil trial to a thorough test. There is a great deal of local interest in this well as it is the only one being drilled on the Jackson Dome and is much more favorably located than others drilled in the vicinity.

Free Run Well Shut Down

The Free Run well, near Coxburg, in Section 18-31-1, Holmes County, was forced to suspend operations several weeks ago on account of the water supply running out as well as the exhaustion of funds. These conditions, however, have been overcome and latest reports indicate that the test will be cleaned out and drilled deeper. W. E. Willis is reported to be perfecting arrangements whereby he will put down a test on a new location about 2 miles south of the Free Run well.

It has been impossible to get any authentic reports from the other wildcats given in our former lists. For various reasons most of them have suspended operations temporarily. Several other wells are expected to begin drilling in various sections of the State but nothing definite about these operations has been given for publication. One very favorable feature of those which will soon be started is that the parties promoting them are amply supplied with funds.

Kentucky Development

Development work in the Blue Grass State is still on the down grade with no quick resumption of work in sight. The dry extremely hot wather of the past month has driven the producer northward where he will no doubt remain until the market is more settled. At the present writing over half of the drilling wells are shut down on account of a shortage of water and it will take several hard rains to overcome this condition.

A summary of the week's work in these fields shows 33 completions, 14 failures, 1 gasser and 18 producing wells with a combined initial yield of 150 bbls. Compared with the previous week this shows 3 more completions, 1 more producer, a decrease of 4 bbls. in flush production, 4 more dry holes and 2 less gas wells. The wells were distributed by counties as follows:

County—	Comp.	Wells	Prod.	Dry	Gas
Barren	9	8	52	1	0
Warren	4	3	58	1	0
Allen	4	2	5	2	0
Owensboro district	3	2	20	1	0
Cumberland-Moore	3	0	0	3	0
Johnson-Magoffin	3	2	10	0	1
Greenup	3	0	0	3	0
Wayne	2	0	0	2	0
Lawrence-Johnson	1	0	0	1	0
Lee-Owsley	1	1	5	0	0
Total	33	18	150	14	1
Last week	30	17	154	10	3
Difference	3	1	4	4	2

Eastern Division

When Chenault Brothers drilled in their initial well on the Hall lease near Grayson, on Tygret Creek in Greenup County in the northeast end of the State, for a small producer in the Corniferous sand it was the general belief of the producers in the east end that a new pool had been discovered, so they sent the scouts into that territory to take up acreage, and a small drilling campaign took place in all parts of the country. The next few tests that were drilled came in dry but the persistent operators kept on going ahead with operations until more dry holes were added to the list. In checking up on the tests drilled, which number about 20, only one is a producer. The three latest dry ones are Tom Hay's No. 1 J. C. Roberts, 1 mile north of the Chenault well; Adams & Caudill's No. 1 Robertson, at Kehoe; and W. H. Young's venture near the hamlet of Grayson.

Johnson-Magoffin Counties

The Fych Oil & Gas Co. scored its second good gas well in the Licking River district of Magoffin County, estimated good for about 1,000,000 feet of gas. No. 3 is under way.

In Section 31 of the South Weir Field, the Carter Oil Co.'s No. 3 William Sayler is estimated at 5 bbls. in the Weir sand and the Short Fork Oil Syndicate's No. 2 J. M. Frazier, same district, is pumping 5 bbls. from the Weir formation.

Lee-Owsley Counties

In Section 36 of the Lee-Owsley County Field, Hupp & Duff's No. 5 Widow Porter is reported good for 5 bbls. in the Corniferous sand at about 1,100 feet.

In reviewing the development of the Lee-Owsley County Field it is found that approximately 90 wells have been completed. The maximum production of the field was reached in August, 1924, which amounted to 1,300 bbls. At the present time 90 wells are making in the neighborhood of 700 bbls., or an average of 7.7 bbls. to a well. Approximately half of this production is coming from the wells on the Ben Smith and Botner leases which were, at the time of this report, producing 340 bbls., an average of 19 bbls. to a well. This leaves the remaining wells producing a little better than 4 bbls. each per day. The limits of the field seem to have already been defined as the edge wells are producing only about 2 bbls. each and there are also quite a number of dry holes.

It appears that structural conditions are largely controlled by the steep dips on the flanks of the synclinal basin to the south of the present producing area.

(Continued on Page 100)

Fields of the Central West

By Whit

FINDLAY, Ohio, Sept. 21.—The week in review shows greater activity in the Lima and Central Ohio fields than any other portion of the Central West Field. Production of the new wells were not as large as the previous week, as no wells of magnitude were accounted for. The Lima Field reported 18 completions and the Central Ohio area 17, while Illinois has 6 wells. Indiana 1 and offside wells numbered 4.

The completions north of the Ohio River for the week were as follows:

Field—	Wells Comp.	Oil Wells	Prod.	Dry	Gas
Lima	18	16	262	1	1
Central Ohio	17	1	3	7	9
Offside	4	1	25	3	0
Indiana	1	0	0	1	0
Illinois	6	4	58	1	1
Total	46	22	348	13	11

Lima Field

Some very interesting development is taking place in new additions to the old Lima Field of northwestern Ohio, both to the north and south of the defined lines of the level Trenton Rock area. The Lima Field is one in which geologists never did very much in the way of finding anticlinal conditions, the country being almost as level as prairie land. It is out of the question to see much to encourage operations from surface indications and for that reason it means the usual drilling of at least a half dozen wells to test even a small area. Just north of the Ohio Field across the State line in Michigan, surface indications are much more pronounced and very similar to the surface over many parts of Kentucky.

To the south of the old field, Shelby County furnishes two of the interesting finds reported for the week. One is a wildcat drilled by Kelley Brothers, 300 feet from the north line and 900 feet from the east line of the Dunden heirs farm, in the northwest quarter of Section 9, Turtle Creek Township, 3 miles west and 4 miles north of Sidney and 5 miles south and 8 miles east of Minster. This well was drilled to a total depth of 1,276 feet, or 28 feet in the Trenton, which was struck at 1,248 feet. No oil was found, but a gas pay with a volume natural of 750,000 feet showed up. This would indicate that a promising gas area may be developed by further testing the territory.

Another Shelby County well, drilled by the Wittmer property trustee, in the northwest corner of the Mary Siegel farm, mapped as the J. Seibel farm, in the southwest quarter of Section 15, Cynthian Township, 7 miles south and 2 miles west of Minster, showed a flush of 25 bbls., adding a considerable acreage of fairly good-looking oil territory to the new addition to the Trenton Rock Field. Top of Trenton was found at 1,307 feet and drilled to a total depth of 1,343 feet.

Auglaize Prospects

Prospects are looking very bright for additional new development work in the extreme southwestern part of Auglaize County, as the Crystal Oil Co.'s third well, located 900 feet from the north line and 800 feet from the east line of the Joseph Woehrmyer farm, in the southwest quarter of Section 23, Jackson Township, and about 2 miles northeast of Minster, made a flush of 25 bbls. and will settle to about a 5-bbl. pumper. Top of Trenton at 1,237 feet and oil at 33 feet into a total depth of 1,270 feet. This well is also far to the south of the producing lines of the Trenton Rock.

To the north of defined lines of the Lima Field, George S. Lacknett's test in the southwest corner of the Nancy Bailey 79-acre farm, being the west half of the northwest quarter of Section 34, Harrison Township, Paulding County, and 1 mile west and one-half mile north of the town of Payne, showed for an average producer, but not yet connected to the pipe line. Top of Trenton at 1,402 feet and drilled 47 feet in, which is the second pay in the Payne Field. The well is said to be good for at least 8 bbls. first head.

In the McGuffey area of McDonel Township, Hardin County, south of the Findlay Field, Samford, Ulrich and others' No. 4 well, 300 feet from the north line and 1,000 feet from the east line of the A. R. Zimmerman farm, is credited with a flush of 30 bbls. Top of Trenton at 1,455 feet and oil at 46 feet in.

In Center Township, Mercer County, Mack P. Colt's No. 10 well, 990 feet from the south line and 330 feet from the west line of the W. M. Miller farm, Section 4, pumped 20 bbls., with top of Trenton at 1,112 feet and 51 feet in the sand. No. 11 well, 990 feet from the north line and 330 feet from the west line of the same farm, also pumped 20 bbls. The sand in this well was struck at 1,123 feet and oil at 53 feet in.

In Madison Township, Sandusky County, the VanVleck-Stowe Oil Co.'s No. 33, on the John Zille farm, Section 29, Madison Township, Sandusky County, pumped but one barrel. Sand at 1,240 feet and oil at 59 feet in.

Hancock County

Three fairly good wells are reported from the Eagle Township section of Hancock County, between Findlay and Lima. Star & Clark's No. 7 Alice Stauffer farm, Section 6, pumped 25 bbls. Top sand at 1,317 feet and oil at 80 feet in. B. Porter and others' No. 19 Henry Deeds farm, same section, pumped 25 bbls., with top of sand at 1,315 feet and 100 feet in, while their No. 22 on the J. H. Haley

(Continued on Page 80)

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NATURAL GAS DEVELOPMENTS

AMERICAN GAS ASSN. ANNUAL CONVENTION

Problems affecting the future fuel supply of the country will be brought up for solution at the seventh annual convention of the American Gas Association, which is to be held during the first five days of the week beginning October 12 at Atlantic City.

The call to attend the convention, issued by H. C. Abell, president of the association, was sent to nearly a thousand gas companies and manufacturers of gas appliances and equipment, and arrangements are being completed to seat more than 5,000 delegates, committeemen and others interested in the conservation and application of heating fuels.

Recent developments in the oil and coal industries are responsible for much of the interest in the deliberations of the country's gas men this year. It is recognized that a situation has developed which will probably mark a turning point in the history of fuel. The question to be decided is whether the manufactured gas industry is in a position to substitute its product on a national scale.

Among those who will discuss this subject are Henry L. Doherty of New York, R. M. Searle, president of the Rochester Gas & Electric Corp. of New York; Horace C. Porter, of Philadelphia; Henry O. Loebell, vice president of the Combustion Utilities Corp.; William P. Ryan and Robert T. Haslam, of the Massachusetts Institute of Technology; Jerome J. Morgan, of Columbia University; Floyd Parsons, of New York; Arno C. Fieldner, of the United States Bureau of Mines, and S. W. Parr, of the University of Illinois. These are all among the foremost authorities on fuel application in the country.

While technical problems are naturally the most pressing, there will also be a general conference to deal with the question of public relations. The gas industry, in collaboration with the electric, telephone and street railway interests, is organized for this work on a national scale and has committees on public utility information in 36 States. This is said to be the first time that these committees have ever met together as a whole.

VENTURA AVENUE GAS WILL SOON BE TAKEN

LOS ANGELES, Cal., Sept. 19.—The Midway Gas Co. and Southern Counties Gas Co., which are now taking dry gas from the Ventura Avenue Field, are reported to be using only about 25,000,000 feet a day, although the field is producing 60,000,000 feet per day. It is asserted, however, that pipe line work now under way will make it possible for the two companies to take all the dry gas the field is producing before cool weather comes.

The Southern Counties Gas Co. is taking gas from the Associated Oil Co. wells and from some of the Shell Co. wells, while the Midway Gas Co. is getting dry gas from the General Petroleum Corp. wells and some of the Shell wells. Field reports indicate that all of the wet gas coming from the wells in this field is being run through the absorption plants for the extraction of casinghead gasoline before the dry gas is turned into the supply lines.

GAS CONFERENCE AT TULSA

The organization of a southwest division of the Natural Gas Association of America may be recommended at a conference of gas men to be held at Tulsa October 2 under the auspices of the Oklahoma Utilities Association. The association conference will draw gas men from all sections of Oklahoma. Arrangements will include a noon day luncheon by the Oklahoma Natural Gas Co.

ASK FOR RATE CHANGES

OKLAHOMA CITY, Okla., Sept. 19.—Three applications have been filed with the Corporation Commission asking for revision of natural gas rates. The Holdenville Gas Co., the Wetumka Gas Co. and the Okemah Gas Co. have each asked permission to establish a domestic rate of 45 cents per thousand feet. This will be an increase at Holdenville and Wetumka and a decrease at Okemah. All three companies have stopped taking gas from the Hughes County Gas Pipe Line Co. and have contracted for a supply from the Tri-County Gas Co. which makes necessary a revision of gas rates.

DEEP TEST FOR GAS NEAR RANDOLPH, N. Y.

RANDOLPH, N. Y., Sept. 19.—Benedum & Trees and the Elko Oil & Gas Co. have materials assembled for a deep test for gas on the S. E. Crandall farm, south of this village, in Cattaraugus County. The new test will be 1,000 feet distant from the deep well drilled several years ago which had to be abandoned with the tools stuck in the hole when the top of the Red Medina sand had been reached and where there was a showing of gas. The second test will be drilled to 4,725 feet if necessary, beginning with a 12-inch hole, and the contractor declares that with ordinary luck he should finish up in 120 days. Three years passed from the beginning to the abandonment of the first well, which was drilled under numerous unfortunate conditions which taught the drillers much which they expect to profit by in the second test. Heavier power and drilling material will be used in the second well. The White Medina sand is the objective.

SHAMROCK FIELD HAS TO SUPPLY CHILDRESS

CHILDRESS, Tex. Sept 19.—The Upham Gas Co. of Mineral Wells has been granted a franchise in Childress for natural gas distribution. The company will also supply Memphis and Wellington, officials of the company have announced.

The new line will be laid to the Shamrock Field, 68 miles north of here, at a cost of $2,000,000. The line will be of 16-inch pipe and plans are to carry it eastward to Wichita Falls and Fort Worth.

The Upham company agrees to begin laying the line at once, as the project has been fully financed. The rate announced for Childress consumers is 75 cents with a 10 per cent discount and a ready-to-serve charge of 50 cents per month. No limit will be set on the amount of gas for industrial use. The Fort Worth and Denver City shops will use 1,250,000 feet daily, it is estimated.

PACKER SUCCESSFUL EXTINGUISHING FIRE

NOCONA, Tex., Sept. 19.—The Humphreys No. 1 Jones, the gasser that had been running wild for about four months in the Nocona Field, has been completely shut off and capped and the burning gasser on the same tract, which was drilled in by The Texas Co., was extinguished by an explosion of nitroglycerin, T. N. T. and other high explosives combined.

The fire was extinguished by Tex Thornton of Amarillo and the wild gasser was shut off by the use of a packer suggested by Bud Hennington, superintendent of the Humphreys Corp., who is located in this field. This tool had been made for this special purpose. The gas is completely under control and none escapes through the ground or main hole, it is reported.

TRIPLE TEST IS MADE ON ABSORPTION PLANT

LOS ANGELES, Cal., Sept. 19.—The United Oil Co. is conducting a test of absorption plant methods in its gasoline plant at Signal Hill, which is attracting deep interest among Southern California operators. The tests will occupy several weeks, and when completed will have added considerably to present knowledge of gasoline extraction, according to the expectation of United officials.

To conduct the tests the United is installing three complete gasoline absorption plants, representing three different methods of extracting gasoline from wet gas. The towers are already up, and the plants are now being put in. The three plants will be operated by United Oil Co. men with a representative of the manufacturers of the three types of plant present. The tests will be conducted with varying grades of gas, including gas with high gasoline content, and gas with low gasoline content. Short runs and long runs will be made to determine the efficiency of the various types of plant under various conditions.

Extraction of gasoline, commonly called "casinghead gasoline" from the wet gas as it comes from the oil well, is an important factor in the gasoline situation of Southern California, where most of the large fields are characterized by high gas production. Well in the Los Angeles Basin range in gas production from a few thousand feet a day to several million, and the gas itself ranges in gasoline content from a fraction of a gallon a 1,000 feet, to over 3 gallons a foot. Probably the richest gas now being produced in the basin is being taken from wells in the Rosecrans Field, which, as a rule, are prolific in gas which often runs more than 2 gallons a 1,000 feet.

GAS SUPPLY FOR QUANAH

QUANAH, Tex., Sept. 19.—Quanah will have natural gas for domestic and commercial use before January 1, 1927, according to the terms of a 40-year franchise signed by city officials. The franchise is granted to Upham Gas Co. of Texas, which is the same company that will furnish gas to Memphis, Wellington and Childress. It is expected Chillicothe and Vernon will also be added to the line. The gas will be piped from the Amarillo and Wellington Fields, and ample pipe line will be laid to provide for the growth of the several towns along the line.

OHIO GAS FRANCHISES

ST. MARYS, Ohio, Sept. 19.—Having obtained a franchise from the town of New Bremen, in Auglaize County, Ohio, for laying gas mains and furnishing natural gas, the East Ohio Gas & Fuel Co. has also contracted with the town authorities for the purchase of the gas mains which have been in some of the principal streets of New Bremen for almost a decade. The same company has obtained a franchise from the village of Minster, 3 miles south of New Bremen, and has put to work a gang of men digging trenches and laying mains.

GAS SUPPLY FOR BEAUMONT

BEAUMONT, Tex., Sept. 19. — The Magnolia Gas Co. has secured a franchise from the county commissioners to extend its natural gas mains to the city. A contract has been signed between the Magnolia Gas Co. and the Southwestern Gas & Electric Co. and it is expected that natural gas will be turned into the city mains within 30 days.

PRESIDENT BUCKNER ON HOUSTON GAS LINE

BALTIMORE, Md., Sept. 19. — "The Houston Pipe Line Co., subsidiary of Houston Oil Co., is now on a net earning basis," said E. H. Buckner, president of both companies, who visited Baltimore to attend a meeting of directors. "Receipts from gas suffice to cover operating expenses and fixed charges and leave a considerable surplus. That is the position of the company at this time, when development has only started.

"The pipe line has been completed from Live Oak and Refugio Counties, Texas, to Gulf, Tex., via Edna, a distance of 178 miles. Each day 20,000,000 feet of natural gas is going through the pipe line to the plant of Texas Gulf Sulphur Co. We also supply the gas used by the city of San Antonio.

"In our possession are signed contracts for 15,000,000 feet of gas to be delivered daily to industrial plants in Houston. We expect to begin delivery on these contracts early in December. We are negotiating with the Freeport Texas Co. to supply gas to operate the plant of that company at Freeport. Eventually we expect to supply industries in Houston with 50,000,000 feet of gas daily.

"Our present daily output is 250,000,000 feet, open flow. We have seven additional gas wells drilling, one of which probably will be completed in 10 days. Ten miles of the Houston end of the main line have been laid and two river crossings completed."

HOUSTON GAS BIDS BY TWO COMPANIES

HOUSTON, Tex., Sept. 19. — Sealed propositions for supplying Houston consumers with natural gas have been received by the City Council from the Houston Pipe Line Co. and the Houston-Gulf Pipe Line Co.

The two concerns in reality are bidding on a set of specifications already furnished them, for the city, through its city attorney, Sewall Myer, has already presented the two companies with a copy of a contract. The question to be settled is which concern comes nearest fulfilling the city's desires.

The proposals have been turned over to the committee composed of Fire Commissioner A. L. Anderson and City Attorney Myer for consideration and recommendation.

The two companies are each seeking to make a contract whereby they would supply the Houston Gas & Fuel Co. with natural gas, which that firm would distribute in place of artificial gas.

The gas company's franchise is such that the City Council is given the final authority in approving contracts the gas company wishes to make. For that reason the city is seeing to it that the contract finally accepted is as advantageous as possible, for this will result in benefits being passed on to the consumers.

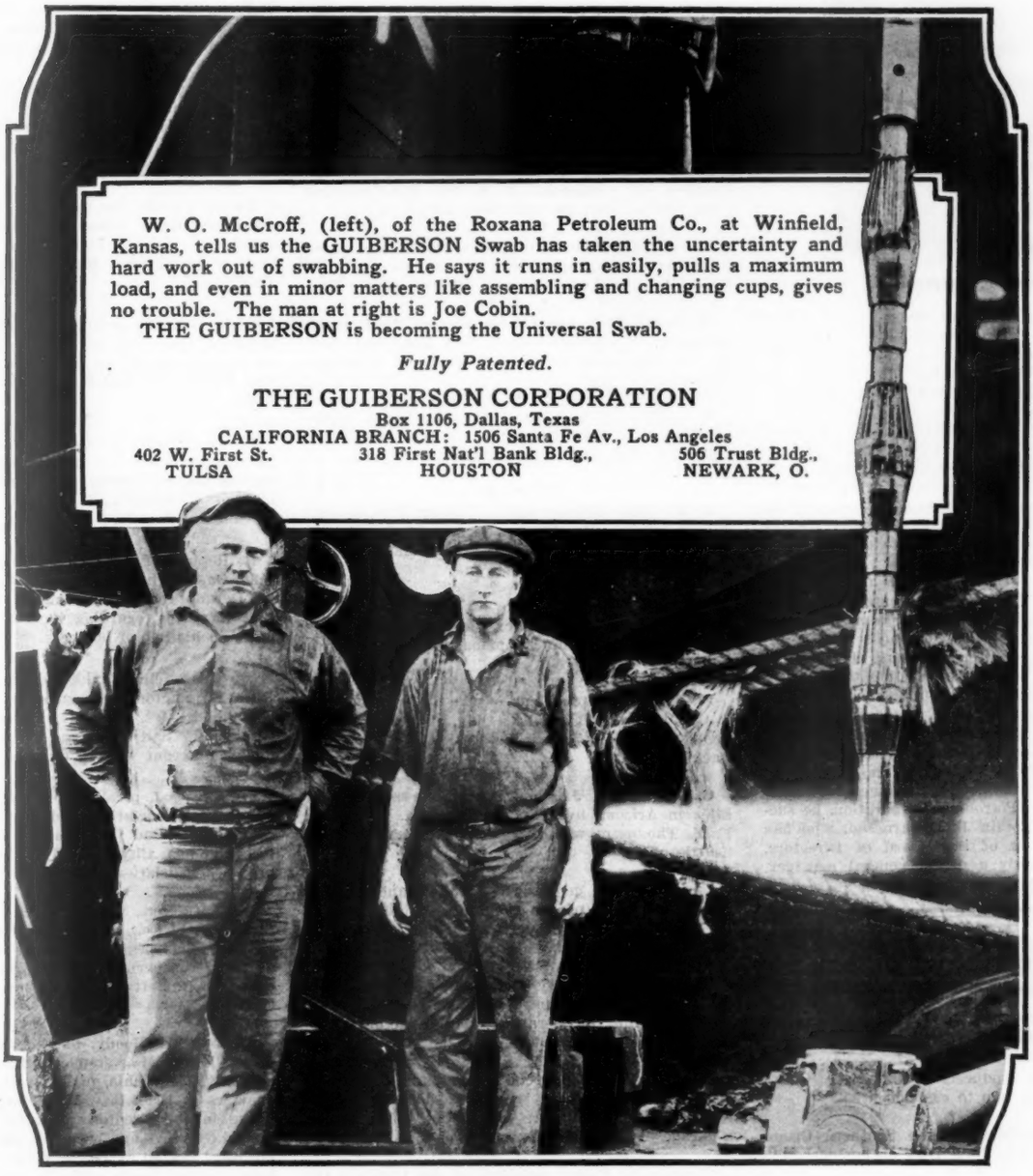
HEADS OIL DIVISION OF CITIES SERVICE CO.

Henry L. Doherty announces the appointment of Frank Raymond Coates as head of the oil division of the Cities Service Co., which includes production, refining, marketing, marine and pipe line transportation properties. Mr. Coates is president of the Toledo Edison Co., Toledo, Ohio.

H. O. Caster, vice president of the Empire Companies, at Bartlesville, Okla., who has been connected with the Doherty organization since 1919, will take up his residence in New York and be associated with Mr. Coates in his work.

TOOK GRIEF OUT OF SWABBING

Easy to Assemble –Easy to Operate—Says Kansan



W. O. McCroff, (left), of the Roxana Petroleum Co., at Winfield, Kansas, tells us the GUIBERSON Swab has taken the uncertainty and hard work out of swabbing. He says it runs in easily, pulls a maximum load, and even in minor matters like assembling and changing cups, gives no trouble. The man at right is Joe Cobin.

THE GUIBERSON is becoming the Universal Swab.

Fully Patented.

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GUIBERSON

BETTER BE SAFE THAN SORRY

MEN KNOWN IN OILDOM

Lionel T. Barneson

It has long been a rule of many of the larger oil companies that before the young men who are prospects for executive positions are to work with their heads, they must work with their hands. A recent addition to this group is Lionel T. Barneson, who by the action of the Board of Directors of the General Petroleum Corporation during the past week, became president of that concern. He is perhaps the youngest operating president of a major oil company in the country, being aged 35 years, and his promotion comes as a result of 17 years of constant activity in all phases of the oil business, from the pipe line ditch to the executive chair.

Mr. Barneson started to work in the oil fields as a roustabout in 1908. He later entered the pipe line gang, and his first promotion came when he was sent to the site of the company's Vernon refinery as construction foreman during the building of the plant. His success in building the refinery caused the management to establish him as the plant's superintendent when it was completed. In 1917 he was made manager of the refining department, and the following year he became assistant to the president of the company. In 1920 he became vice president and general manager. As president of the General Petroleum Corporation, he succeeds his father, Captain John Barneson, who has been made Chairman of the Board of Directors. R. A. Sperry, formerly assistant general manager, has been made general manager.

PERSONAL PARAGRAPHS

John Flett has returned to Petrolia, Ont., after several years in the Burmah fields.

* * *

Harlan Read, oil producer, of Okmulgee, Okla., has returned from a trip to eastern cities.

* * *

A. S. Hardin, president of the Southern Crude Oil Producing Co., is in New York on business.

* * *

Dr. Edmund Stinnes has withdrawn from the boards of the Hugo Stinnes Riebeck Mining & Oil Company.

* * *

R. E. Dea of Denver, connected with the Columbia Oil Co., spent several days in Casper, Wyo. recently.

* * *

J. S. Foley of the Columbian Tank Co., is in Casper, Wyo again after a trip through the oil fields of Montana.

* * *

W. A. Gray of the Union Oil Co. was a recent visitor in Lon Angeles but is again on the job at Oleum Refinery.

Lacey Walker, assistant treasurer of the American Petroleum Institute, has been visiting the Mid-Continent fields.

* * *

Edwin P. Hopkins, consulting geologist, 26 Broadway, New York, has returned from a two months' trip to Venezuela.

* * *

William G. Johnson of the firm of Replogle & Johnson, operators, of Okemah, Okla., spent the past week end in Tulsa.

* * *

A. A. Rollestone and Claude Freeland, of the Roland Oil Company of Bristow, Okla., were Tulsa visitors for a few days recently.

* * *

J. K. Ridge of the Sheffield Steel Mills Company of Kansas City, Mo., is calling on the trade in West Texas and New Mexico territory.

* * *

Rodney Durkee, comptroller of the General Petroleum, is back at his desk in Los Angeles following a three weeks' trip to San Francisco.

* * *

Vern T. Taylor, of Indiana, Pa., president of the Peerless Oil Company, is in the Mid-Continent Field looking over the petroleum situation.

* * *

Howard Tremaine of Chatham, Ontario, is superintending drilling operations for the Kanawah Oil Co. in its Allen Lake test near Medicine Bow, Wyo.

* * *

M. R. Singleton, general manager of the Paragon Refining Co., who has been in New York and other eastern points, has returned to his home in Toledo, Ohio.

* * *

R. A. Thacker has joined the sales forces of the Sheffield Steel Mills Company of Kansas City, Mo., and will work out of the Mid-Continent offices at Tulsa.

* * *

E. W. (Ted) Hughes was in Casper, Wyo. several days recently. Mr. Hughes is one of the pioneer operators in the Lost Soldier and Mahoney Dome districts.

* * *

Benjamin Seidmann, who left the service of the Silva Plana in Poland after the recent strike, has been appointed technical manager of the Nafta Company.

* * *

Ed H. Moore, president of the Independent Oil & Gas Company of Tulsa, Okla., is leaving California for Tulsa, after a vacation spent on the Pacific Coast.

* * *

C. F. Hanson, Jr., has been made manager of sales in Arizona by the Union Oil Co., succeeding F. F. Thompson who has been transferred to the Seattle office.

* * *

John B. Kerr, geologist, of San Francisco, has returned from a trip to the Midway Field, where he examined some properties in the interests of San Francisco clients.

* * *

L. E. Etchison, head of the land department of the Amerada Petroleum Corp. in Arkansas, is in the sanitarium recuperating from a slight operation recently performed.

* * *

Dalton L. Jobe, independent operator, of Okmulgee, Okla., has had his trip to Florida interrupted by the theft of his car, which was stolen out of a garage in Memphis, Tenn.

* * *

Clarence M. Fuller, president of the Richfield Oil Co., and vice president of the United Oil Co., has just returned to Los Angeles following a six weeks' trip to the Atlantic Seaboard.

* * *

William A. Read, of London, England, president of the Anglo-Texas Oil Company, is in Tulsa. He made one of his regular trips across the pond to visit the office and properties of his company.

* * *

B. W. Musser, superintendent of operations for the Utah Oil & Refining Company, was a Casper, Wyo., visitor from Salt Lake City recently. He spent a few days examining the work of the firm and visited the well of the company now drilling at Black Mountain in the Big Horn Basin.

J. C. Sibley, Jr., of Franklin, Pa., is in Bowling Green, Ky., where he will make his headquarters while looking after his interests in the Western Kentucky Field.

* * *

Charles Gartlan, of the Daniel Boone Oil Company, is on the job at Burkesville, Ky., to see No. 8 Lucy Logan, in the Kettle Creek district of Cumberland County drilled in.

* * *

W. B. McCormick, of the Judio Company, Inc., and family, have just left Burkesville, Ky., for a trip through northern Ohio, from where he will go to his home at Baltimore.

* * *

The Okmulgee offices of the White Eagle Oil & Refining Company have been moved to Tulsa, and will remain in charge of Ralph H. Cummins, who heads the White Eagle operations in Oklahoma.

* * *

A. G. Nusser, head of the land department of the Standard Oil Co. at Shreveport, La., has returned from a pleasant vacation spent with his family at Findlay, Ohio, and resorts in Michigan and on the Great Lakes.

* * *

Joe N. Croom, for three years oil editor of the Okmulgee Daily Times, is preparing to move his family to Tampa, Fla., where he will join the staff of the Tampa Morning Star, a new daily in that city.

* * *

Alvin Untermeyer of the financial firm of Untermeyer & Company, of New York, headed a party of eastern vistors on a tour of the properties of the Pierce Petroleum Company in the Mid-Continent Field.

* * *

Frank Carman, pioneer California operator, was in San Francisco for the Diamond Jubilee renewing old acquaintances. Mr. Carman is now a resident of Washington, D. C., and has oil properties in Ontario, Canada.

* * *

R. Repine, of Springfield, Ohio, representing the Foos Gas Engine Company, visited Shreveport and El Dorado recently looking over the situation in that territory regarding immediate and future activity in his line of business.

* * *

Governor Nellie Taylor Ross and companion, Miss Ruth Harrington, were guests of Col. Burt H. Sinclair and Mrs. Sinclair on an inspection trip through the Salt Creek and Teapot Dome Oil Fields during a recent visit to Casper, Wyo.

* * *

W. E. Wood, president of the Okmulgee District Oil & Gas Association, and secretary and treasurer of the Kingwood Oil Company of Okmulgee, went to Oklahoma City recently to combat the newly proposed legislation regarding gross production tax.

* * *

W. E. Garrett, who has been connected with the Standard Oil Co., in Lake Charles, La., for the past 13 years, has been transferred to Alexandria, La., as district superintendent. J. C. Terrell will succeed Mr. Garrett in the sales department at Lake Charles.

* * *

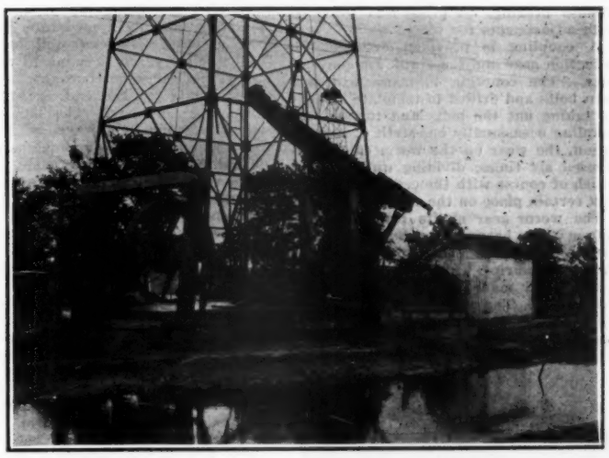
Ambrose A. Moody, of the Jarecki Supply Co., of St. Louis, Mo., stopped off to spend the week end in Toledo, Ohio, on his way east to the headquarters at Erie, Pa. Mr. Moody is a well known figure in the Trenton Rock Oil Fields where he landed 34 years ago with the same company. Having been located at Toledo many years he was kept busy shaking hands with his host of friends.

* * *

F. D. Williams, president of the National Transit Pump & Machine Company, and N. A. Newton, sales manager for the same firm, were in Casper, Wyo., for a few days' visit recently. The two men are making a round trip over the country and visiting all the principal oil centers. They expect to leave Casper for the Pacific Coast after a short trip into the Colorado country and then return by the southern route through the New Mexico fields, reaching Tulsa in time for the Petroleum Exposition, then proceeding by way of Louisiana to their homes in Oil City, Pa. Mr. Williams is one of the few remaining old timers in the oil business who stick in the harness.

'ONE' Lufkin Pumping Shaffer Oil & Refining tire Field

Refining Company equipped the entire field with Lufkin Units, proving performance to be the best salesman after all.



The photo above shows a close-up view of a Lufkin pumping unit and hoist

If you are interested in this latest development in pumping efficiency and economy, write for complete details and prices

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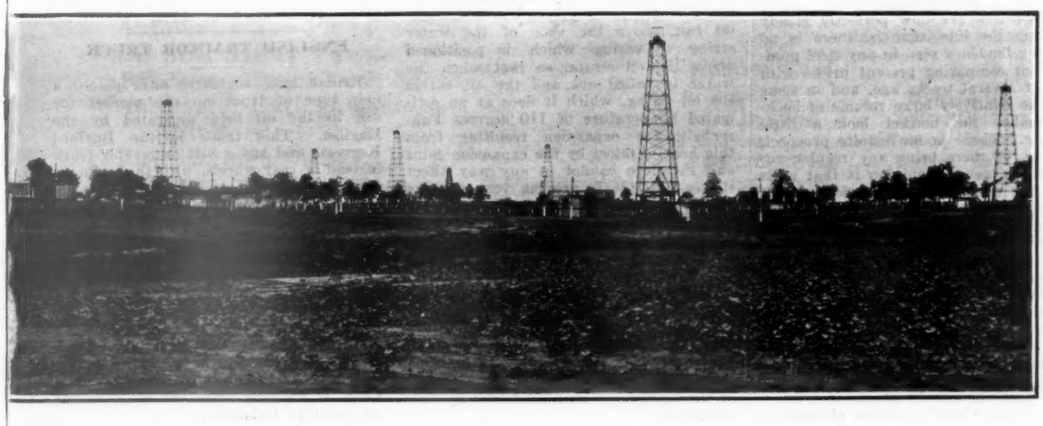

EQUIPMENT AND SUPPLIES

LUFKIN PUMPING UNIT DESIGNED FOR 100 H. P.

The Lufkin pumping unit is designed in proportion to a 4½-inch standard rig iron crank. The worm reduction gear and the whole mechanism, outside of the motor, is designed to transmit 100 h.p. The crank used is a regular rig iron crank and pin, except it is made of semi-steel, and is mounted on a 4½-inch special steel shaft. The main journal is a double Timkin bearing, oil proof and provided with adjustments for wear.

A coupling is provided between the reduction gear and the crank for convenience. The coupling is made with six turn bolts and drilled to template so that by taking out the bolts and turning the coupling occasionally one-sixth of a revolution, the wear on the worm can be increased six times, dividing up the wear which of course with the crank, will come at a certain place on the worm in pulling.

The worm gear shafts run in renewable machine bronze bearings. The worm itself is made with a semi-steel center and Tobin bronze ring. The worm shaft is heat treated and made of best material for the purpose. The shaft is forged and the worm is cut outside of the diameter of the shaft and not inside. The worm shaft

runs on ball bearings, a double bearing being provided on the thrust side and single bearing on the other side.

A fly wheel is provided on the work shaft, forming part of the coupling to the motor or gas or oil engine, as may be used. When it is desired to use a gas or oil engine to drive this unit, two bearings with shafts, also friction clutch, coupling and sprocket are provided in place of a motor, unless the engine is furnished in clutch, whereas only a sprocket is necessary. The whole machine is mounted on an extra heavy bed plate that preferably should be set on concrete. However, many of these machines have been placed on wood foundations.

Special attention is called to the oiling system in the worm reduction gear, and main bearing which after being filled requires no attention other than occasional addition of oil to the reservoir in the bottom of the worm reduction gear, oil level of which is marked and can always be tested by use of the two pet cocks between the two high and low lines of the oil.

The ratio of the worm gear is 19 2-3 to 1, which with a 600 speed motor gives 28½ revolutions to the crank with an oil or gas engine. This speed can be increased or decreased as desired. When pitman is disconnected and motor runs on the 1,200 speed for pulling the rods and tubing, a steel sprocket is provided to drive the hoist.

ARTICLES ON WELDING

The September number of "Oxy-Acetylene Tips," the publication of the Linde Air Products Co., is unusually interesting. It contains several articles that will attract the attention of the oil industry, among them one on "Putting Curves Into a Pipe Line," and also a story on "Welding Organization in a Large Plant," which deals with the application of welding apparatus with pipe line construction and operation. The stories are well illustrated and contain many pictures of welded oil field equipment, including a special tank head manifold.

REMARKABLE STEADINESS IN STEEL; NO DECLINING TENDENCY ANYWHERE

By B. E. V. Luty

PITTSBURGH, Pa., Sept. 21.—Buying of casing and other oil well tubular goods continues at a fairly high rate, there having been a little tapering off from the very heavy rate of June, July and August. Relatively small orders for line pipe are being placed at irregular intervals, making a moderate aggregate, and all the mills can well handle for early delivery, on account of the large orders booked some time ago, and which it will take to the end of October or longer to complete. The movement in merchant pipe is quite good, representing about as high an average as is maintained for any length of time. Jobbers have very small stocks and are ordering practically from hand to mouth. They have no margin in stocks whereby they could reduce stocks and they have no disposition to build up stocks.

The volume of new business, aided by backlogs on books, easily enables the pipe mills to maintain a high rate of operation, 85 or 90 per cent of the total capacity. There is almost no idleness excepting two plants in Pittsburgh which represent a sort of reserve capacity of the leading interest, and a few butt weld furnaces scattered through other plants.

Welded Goods Firm

Prices of welded tubular goods are perfectly firm as they have been right along.

As to the steel industry in general, it has been running at a slightly higher rate than recently estimated, but is not increasing operations in any noticeable way at the present time. A fresh and more precise basis was furnished for estimating the operating rate of the industry by issuance of the report of steel ingot production in August, which showed an output of 10.9 per cent above that of July, or several per cent more than the common estimates. As production was increasing during the month, the rate September 1 may be taken at about 15 per cent above the July rate, and substantially this rate is now being maintained. While July was the low month for production since September, 1924, it was not really a low month, and the present rate is a fairly high one, being between 20 and 25 per cent above the average rate in the six years since the war up to the present year.

How well this year is running in steel trade activity is shown by this fact, that if the present rate of production were to continue to December 31, the year's ingot output would be about 42,600,000 tons. Three years, 1917, 1918 and 1923, had a higher output, but the highest of the three, 1917, ran only 1,000,000 tons above 42,600,000 tons. Accordingly, there is more chance of production falling off late in the year than of its increasing over the present rate.

Prices Steady

Steel prices are now perfectly steady all along the line, that is, there is no declining tendency seen in any steel product, even comparing present prices with those of several weeks ago, and in some lines the relatively large volume of bookings makes the market look a little stronger. There is no definite prospect, however, of there being any regular advances, the general opinion is that mills could not establish higher prices except by their becoming completely filled with business and falling behind in deliveries, and this could not occur except by buyers making forward commitments, which they are quite indisposed to do. There is ample productive capacity for the present consuming requirements.

There is, in fact, a remarkable harmony between production, shipments, consumption and buying, a steadiness which might seem natural enough, but which does not usually obtain in steel.

The Steel Corp.'s unfilled obligations decreased only 26,000 tons during August, indicating that bookings were only about 2 per cent under shipments. Previously, shipments had been made up in considerable part of old business, there having been decreases in unfilled tonnage of 170,000 tons in July and about 400,000 tons a month in the four preceding months.

Pig iron continues dull, but quite firm. There has been no little pig iron buying in some other districts.

Connellsville coke is quiet and strong. Heavy melting steel scrap is quotable down 50 cents, an incident of no particular significance.

NEW EXPANSION JOINT FOR OIL WELL CASING

It has been determined by careful investigation on the part of many experienced oil operators that many of the crooked and broken strings of casing are a direct result of heat and expansion of the casing down in the hole, brought about by the heat of the oil, and other causes. When a joint of casing at the bottom of the well becomes sufficiently heated to expand, it usually becomes wedged in the hole and then has to support the weight of the entire string down to that point, often resulting in a bent or broken string.

A new expansion joint different than any other previously developed, has recently been announced by the Lorraine Corp., of Los Angeles, Cal.

The idea incorporated in the Thompson expansion joint is very simple. It consists of a coupling which screws on to the bottom of a length of casing. Into the lower end of this coupling is screwed an inner lining having the same inside diameter as the casing. This is surrounded by an outer sleeve, the bottom end of which screws into the next lower joint of casing in the well. The coupling, sleeve and liner are so constructed with shoulders to limit the movement of the sleeve and liner from each other, and to prevent complete separation of the sleeve and liner from each other, and to prevent complete separation of the joint in the event it is desired to pull the casing, also making it possible to lower the casing with the joint in place.

The Thompson expansion joint provides an inner liner which has ample space for expansion without in any way affecting the outer casing or coupling, due to the design and construction employed, and is provided with ample means to prevent turning, or movements between the inner liner and the sleeve, except such as to enable screwing into the casing. It is placed approximately 60 feet above the shoe of the water string of casing which is positioned above the oil strata, so that when the water is bailed out and the oil enters the oil string, which it does at an estimated temperature of 110 degrees Fahrenheit, the expansion resulting from this heat is taken by the expansion joint and therefore cannot in any way affect the casing. It is proving very popular in the field, and is given credit for eliminating much of trouble resulting from crooked and broken strings encountered in drilling.

ISSUE NEW BOOKLET

The Schutte & Koerting Co. of Philadelphia have printed a booklet on oil, gas and power equipment. It is illustrated and gives a complete description of the equipment manufactured by this company.

BROWN INSTRUMENT CO. ISSUES TWO CATALOGS

The Brown Instrument Co., of Philadelphia, has printed and circulated two new catalogs. Catalog No. 44 is devoted to the Brown Indicating and Recording Tachometers, and Catalog No. 74 describes the operation of the Brown Recording Pressure and Vacuum Gauges.

The Brown Electric Tachometer consists of a small generator driven by a shaft, the speed of which is to be indicated, and an indicating or recording voltmeter graduated in revolutions per minute. Several instruments either recording or indicating can be connected to one generator without the use of any compensating means, due to the high resistance of Brown instruments. Brown Electric Tachometers are extensively supplied for measuring the speed of propeller shafts on shipboard with instruments located in the engine room and on the bridge.

Brown Gauges are better known to the oil trade, and the new catalog gives a thorough description of the most intricate workings of this product.

NORTHRUP EQUIPMENT NOW FIVE YEARS OLD

This week marks the fifth anniversary of the founding of the Northrup Equipment Co. of Parkersburg, W. Va. This company has enjoyed considerable success in this brief period under the direction of its founder and present manager, who is well known to the trade as "Tommy Northrup."

Starting in September, 1920, Mr. Northrup began the manufacture of Neco working barrels and accessory equipment in a small plant located 4 miles above Parkersburg. The growth of business made it necessary to find larger quarters and the company moved to its newly constructed plant in Parkersburg the first of June. This new plant is several times larger than the former location and was planned especially to meet manufacturing requirements and give increased production capacity.

F. J. Ackman represents the company in Texas, Louisiana and Arkansas, and H. T. Torner in Oklahoma and Kansas.

MADE SALES MANAGER

L. M. Zimmer has been appointed general sales manager of the Linde Air Products Co., manufacturers of oxygen, and of the welding gas division of the Prest-O-Lite Co., Inc., manufacturers of dissolved acetylene, succeeding L. M. Moyer, who resigned August 1. Mr. Zimmer entered the employ of the Linde Company 9 years ago as junior salesman and has steadily risen in rank. Most of the time he has represented the company in the Central West, coming to New York early in 1924 to act as assistant sales manager.

ENGLISH TRACTOR TRUCK

British auto engineers have placed a new type of truck on the market for use in the oil fields operated by the English. This truck is the Burford Kegresse and has a belt or tractor track instead of rear wheels, with the ordinary front wheels and regular truck body. It is designed to carry any load up to six tons and is made in London.

MACHINES TO COLOMBIA

The California Pipe Line Machine Co. recently shipped three pipe laying machines to Cartagena, Colombia, South America, to the Andian National Corp. for the construction of 450 miles of 10-inch pipe lines that the Andian National Corp. is building from the coast to the oil fields in Colombia.

Can You Afford Anything Less Than *Quality* Fittings?

THE cost of Oceco Equipment is but a fraction of 1% of the value of the average tank filled with volatile oil. It's a very small percentage for *sure* and *safe protection —recognized protection.*

Underwriters have recognized the value of this Equipment by the lower insurance rates on tanks thus protected.

Leading tank manufacturers have subscribed to its value by standardizing on Oceco.

Principal oil companies continue to use Oceco because they have discovered its value by experience. They realize that *quality* in such important equipment is *essential!*

If you have not Oceco equipped, we'd like to lay facts before you which we believe will result in your saving money.

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Compact, sturdy, up - to - the - minute, easily looked after, delivering power seemingly without effort, and always equal to the demands—there you have the Hope Gas Engine. It will give you the power you need, at least cost, month after month and year after year. Its dependability has been proved repeatedly, in the nearly 20 years it has been before the power-buying public.
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PRESSURE IN VOLUMETRIC CONTROL VARIES AS A FUNCTION OF TIME

By Stanley C. Herold
Petroleum Geologist, Stanford University, California

Reservoirs of Hydraulic Control were analyzed without the relative curve which we introduced in the preceding installment of this series. The very circumstance which makes the curve impossible in that control, makes it unnecessary. It was impossible because infinite time, measured along an X-axis, can not be divided into percentages of the entire life of the reservoir—any division of an infinite quantity by a finite quantity results in an infinite quantity. For example, 10 per cent of infinite time is itself an infinite period of time, and it can therefore not be scaled on a given axis. The curve was unnecessary because pressure is mathematically constant with time; that is, it does not vary as a function of time.

Pressure in Volumetric Control is found to vary as a function of time, the particular function being the square of time remaining. Time remaining is finite; therefore the relative curve is possible. Furthermore, we consider it necessary. By virtue of the curve itself, and the principles upon which it is based, we shall be able to make a complete analysis of the two finite controls. Not only are computations greatly facilitated by its use, but, of greater importance at the present time, the fundamental and significant differences between Volumetric and Capillary Controls are also more rapidly understood. Our mathematical analysis is now entirely dependent upon this curve with its outstanding conveniences.

Pressure-Volume Relations

430. In Articles 126 and 127 we dealt with an apparatus consisting of a rigid gas tank. The expermient was carried

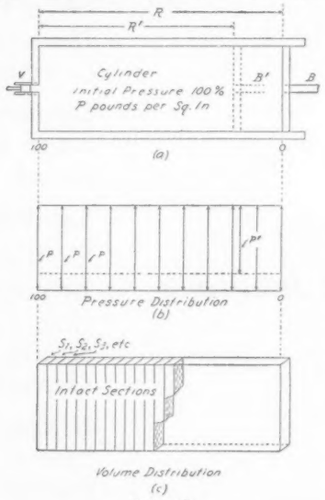

Figure 431

on in potential phase, and by a simple process of reasoning, the straight line relation potential pressure and potential volume for the delivery of gas from this Volumetric Control reservoir was derived.

In Article 150 the discussion pertained to the cylindrical or prismatic gravity solution tank. Again the straight line relation between the two potential functions on the delivery of liquid was observed. In potential phase, the mechanics of the two fluids are the same. (Article 202).

It is well enough to obtain pressure-volume relations in the manner prescribed in the articles referred to, so far as Volumetric Control alone is concerned, but we are intending to deal subsequently with Capillary Control. Now it so happens that the relations between the two functions in the latter control can not be thus readily derived. There is a method which is suitable for Capillary Control. It requires the use of integral calculus. If it is rigorously correct for one control, must it not be so for the other? Then suppose we proceed to apply this method to the case of the rigid tank. Of course, we will obtain once more the straight line function between pressure and volume. We will acquaint ourselves with the method now; then when we parallel it for reservoirs of Capillary Control, and obtain the parabola instead of the straight line, we will not feel so strange about it all.

431. Figure 431 (a) represents a cylinder with a piston B and a valve V. The full sweep of the piston, R, extends from 0 to 100 units of distance. The valve is so constructed that, when closed, its surface is flush with the inner surface of the cylinder head; we therefore have no "clearance" to reckon with. This cylinder is not a rigid tank unless the position of the piston is fixed. Consider the cylinder pumped up with air to P pounds per square inch when the piston is at 0. The apparatus is now to be our rigid tank. Delivery from V is to

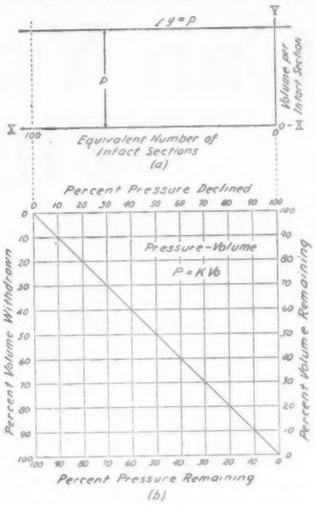

Figure 432

take place when B is at 0, but we may interrupt flow at any instant by closing the valve, and move B between periods of flow merely for the purpose of taking observations. These interruptions will not interfere with pressure-volume relations. But we must always move the piston back to its original position after the interruption.

The air in the cylinder exerts a pressure of P pounds per square inch in all directions. We may represent this intensity of pressure by a line drawn to scale, with a direction corresponding to any one of the possible directions. For convenience let such a line be vertical. Then the conditions within the container can be shown as in Figure 431 (b). We can place an arbitrary number of these lines with a length P along a base line corresponding to the length of the container, showing that the pressure distribution throughout the interior is constant.

According to Article 117, we may imagine the interior of the container divided into a number of columnar sections of equal area S_1, S_2, S_3, etc., each containing the same number of molecules. We still consider these sections intact when they contain a number of molecules appropriate for the pressure P. Then, corresponding to the pressure distribution, we have a volume distribution of N intact sections filling the entire container, as shown in Figure 431 (c).

Making the Experiment

432. Having now established the initial conditions for the container, we may proceed with the experiment. Let some of the air escape from the valve, and close it. P is reduced to P', and the sections are no longer intact. How far

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A genuine personal interest in the handling of all orders—down to the smallest—and an unceasing service of cooperation with users in assuring their unqualified satisfaction—that's the thing we're most proud of.

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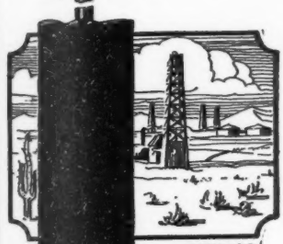
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Today *The Larkin Line* is more complete than ever, but it still has its basis in the one characteristic we have always held fundamental—*thorough reliability in the performance of the duty for which intended.*

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must B be moved so as to re-establish intact sections, and how many such intact sections will there be? By Boyle's Law, in absolute phase,

$$R+P'=R'+P \quad \ldots\ldots(1)$$

for R and R' may be taken as volume, inasmuch as the diameter of the cylinder is constant. Thus

$$R' = \frac{R\,P'}{P} \quad \ldots\ldots(2)$$

But R is 100 per cent of the cylinder length, and P is 100 per cent of the pressure. Then

$$R'\% = P'\% \quad \ldots\ldots(3)$$

If there were N intact sections in the beginning, there must now be a number N', such that

$$N'\% = R'\% \quad \ldots\ldots(4)$$

where N' is expressed in terms of 100 per cent for N.

From (3) and (4) we may write

$$N'\% = P'\% \quad \ldots\ldots(5$$

and we see that N' is always the equivalent number of intact sections remaining, with the piston at O, as of a rigid tank, for corresponding values of P', the latter denoting pressure remaining.

In this manner we have justified ourselves in constructing Figure 432 (a), consisting of two axes, X and Y. Let the ordinates denote volume, or number of molecules, per intact section, and let the abscissas denote pressure, or that is the same thing, the equivalent number of intact sections. The horizontal line, y=p, simply shows that the number of molecules per intact section is some constant number p. This is, of course, in accordance with Avogadro's Law applied to equal volumes of the same gas. As applied to different gases, we observe that any gas other than air might be used in the experiment, only provided that it is a permanent one.

Now the principles discussed in Articles 118 and 119 may be applied to our problem. Consider the areas of the columnar sections to become smaller and smaller, approaching the vanishing point, allowing the number of such sections to increase correspondingly. Ratios between N' and N are not affected by this procedure. Since all conditions hold, up to and including the vanishing point, where the area of each section is zero, and the number of sections is infinite, we are permitted to integrate the line y=p, wherein y is volume, with respect to the variable x denoting pressure. By this integration we obtain

$$y=px$$

the inclined straight line shown in Figure 432 (b), with origin in the lower right-hand corner, corresponding to the origin for the original line. This origin indicates to us the proper titles and directions for scales along the lower and right-hand sides of the curve. The other titles and scales are added for convenience. We here have the relative curve between potential pressure and potential volume.

The hyperbola of Boyle's Law in absolute phase is converted by this process into the straight inclined line. And in the manner of Article 275, we shall adopt the formula

$$P=K\ Vo$$

as the mathematical smybol for Volumetric Control. The conversion is expressed thus:

$$PV=K \rightleftharpoons P=K\ Vo$$

Volume-Time Relations

433. Write the equation between pressure and time thus:

$$P=K'\ T^n$$

and the equation between pressure and volume thus:

$$P=P''\ Vo$$

It is evident that P may be eliminated between the two, leaving the expressed relations between volume and time.

$$K''\ Vo=K'\ T^n$$

or

$$Vo=K\ T^n$$

This is the formula given in Article 80, paragraph (b). It reads: The potential volume equals the square of time remaining multiplied by a constant. The relation holds only for Volumetric Control. As in the case of pressure and time, it is essential that the physical condition of the orifice be constant during the course of production, in order that this relation be fulfilled.

This equation is likewise a parabola. In Figure 420 the title in the vertical direction may be changed to Potential Volume. It will likely be necessary to alter the scale units to suit, or what is the same thing, stretch the curves in the vertical direction so that ordinates comply with the given scale. (Article 428).

The relative curve for volume-time is identically the same as that for pressure-time. In Figure 425 replace the title Percent Pressure Remaining by Percent Volume Remaining, and the title Percent Pressure Declined by Percent Volume Withdrawn. Now the curve may be used for problems involving volume similarly as in Article 426.

The volume-time curve is represented in practice by the Cumulative Production Curve. (Article 23). In dealing with cumulative production, however, we measure volume which has been withdrawn from the reservoir, and not that which still remains within the reservoir. Our cumulative production curve is the volume turned upside down. This becomes evident on inspection of the volume-time relative curve.

Since the volume-time and pressure-time curves are the same, except for scale, we may say that the cumulative production curve is the inverted pressure-time curve, stretched to suit the scale. When we measure pressures, we automatically measure volume remaining.

Suppose the tank of Article 426 had produced 360 gallons of liquid by 4 p. m. What potential volume remained at that time?

64% of the pressure remained.

From Figure 432 (b), for 64% pressure remaining 36% of the volume has been withdrawn. That is,

360 gallons=36%

1,000 gallons=100%

and 1,000—360=640 gallons remaining at 4 p. m.

Two observations on pressure, and the knowledge of the volume produced during the time between them, are sufficient for computing the contents of the reservoir at the instant of the first observation. at that of the second, or at any other instant during the life of the reservoir.

Constant Production Per Pound Decline

434. The expression, constant production per pound decline, is simply a mode of stating the relation between pressure and volume by the formula

$$P=K\ Vo.$$

For every unit of pressure declined, a constant number of units of volume have been produced from the reservoir. Or, for every unit volume produced, the pressure has declined a definite and constant amount. For the first of these statements we may write.

$$Vo/P=K'$$

and for the second,

$$P/Vo=K\ .$$

The constant K' is obviously equal to the reciprocal of K.

The following conditions are to be noted:

(a) The three equations above are the same. They show the straight line relation between the two functions, illustrated in Figure 432 (b).

(b) However P may vary with any other function of of delivery. Vo must vary likewise with the same function. For example, P varies with the square of time; therefore Vo must vary with the square of time.

(c) P and Vo quantities in potential units. We can not expect quantities measured from a zero base other than that determined by the constant back pressure to fulfill this relation, whether this relation be expressed by a simple mathematical formula, by a curve, or as the constant production per pound decline law.

(d) These equations are not expressions of Boyle's Law. They are derived from Boyle's Law in the case of the gas reservoir, and from the laws of Mechanics in the case of the solution tank.

"—and *lowered* our cost per foot"

These reports on rotary bailing with Parkersburg Bailing Reels tell the same story—a "lowered cost per foot."

Using your 26-inch Bailing Reel, we ran a 4½-inch x 30-foot bailer to a depth of 2,500 feet in 1 minute, and pulled out, full of sand pumpings, in 3 minutes.*
— near Mexia, Texas

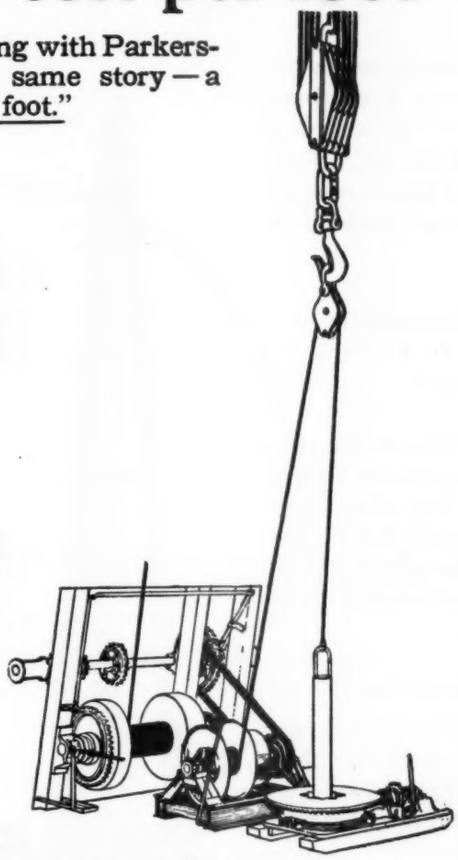
When the hole was down 1,622 feet, the 6⅝-inch casing was set to bottom. Then your 26-inch bailing reel was installed.
In spite of handicaps from wet steam, this hole was bailed dry in 1 hour and 15 minutes.*
— at Wichita Falls, Texas

Your bailing reel installed after the 6⅝-inch casing was set at 1,234 feet. With a 5½-inch x 40-foot bailer, the hole was bailed dry in less than half the time usually required; this in addition to saving the time usually required for changing the lines.*
— R. & D. Rogers No. 1 — Nocona, Tex.

After installing your bailing reel, we went to bottom with the drill pipe to wash out. When ready to bail, we used a swab instead of a bailer.
Your reel worked perfectly, handled easily—and the 1,333-foot hole was swabbed dry in 1½ hours.*
— Harmel pool, near Olney, Texas

At 1,620 feet, the 6⅝-inch casing was set to bottom. With your bailing reel, and using a 5½-inch sectional bailer, 60 feet long, we bailed the hole dry in 1 hour and 10 minutes!*
— Hill & Roberts Pool, near Wichita Falls, Texas

With your bailing reel, the 4-inch x 50-foot bailer is pulled, full of sand pumpings, from a depth of 2,980 feet in exactly 4 minutes. We are making round trips with the bailer in 6¼ minutes.*
— at Mexia, Texas



Not a minute spent changing lines! Operators tell us "installed, rigged-up, and ready to bail in less than 20 minutes."

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*Names of these producing companies on request.

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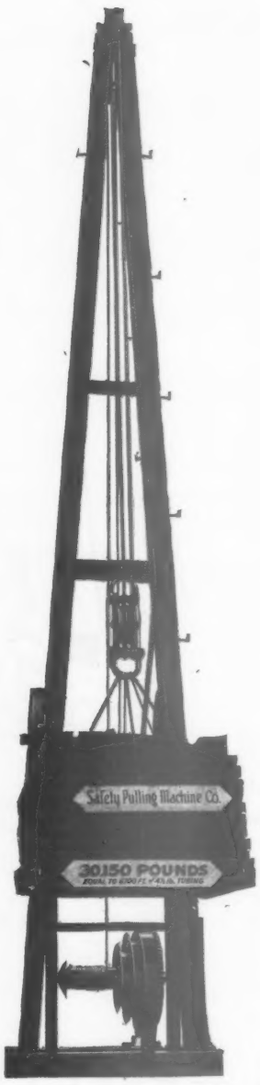
Eclipse Deepwell up to 8000 ft. 2" Tubing Weight 3645

Wreckers also made to order, approximate weight 5000 lbs. One of our customers stated that he has pulled a weight equal to 100 tons with one of these machines.



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Mast 8x10x36 ft., Douglass Fir A-Style Two Wheel Truck, two 16" Bronze bearing crown pulleys, 2½ Steel Pin mounted in malleable boxings. Large supporting plate 16" dia. between crown pulleys, eliminating any chance of bending pin.

Reel or Drum; 32 lb. 8¼ casing filled with concrete for winding drum, differentials banded with 3/16 band iron, brake surface 6"x40", choke brake style same as star drilling machine.

The whole reel assembly is mounted on 2¾ square steel shaft extending clear through reel, secured by three heavy castings.

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INDEPENDENCE, KANSAS

In Article 275 the hyperbola of Boyle's Law was converted into

$$P=K \quad \ldots\ldots\ldots (1)$$

and in Article 432 the same hyperbola was converted into

$$P=K\ Vo \ldots\ldots\ldots (2)$$

In Capillary Control we shall convert the hyperbola into

$$P=K\ \sqrt{Vo} \ldots\ldots\ldots (3)$$

Thus it is to be observed that the straight line relation between pressure and volume exists only in equation (2) for Volumetric Control. The constant production per pound decline law only holds for Volumetric Control. It will not apply to the other controls. No attempt has been made to apply the law to Hydraulic Control in practice, because there is no decline in pressure. Frequent attempts are made to apply the law to reservoirs of Capillary Control. The inevitable failure of calculations has apparently discredited the law which depends entirely upon the mathematics of a particular group of reservoirs.

Velocity-Time Relations

435. Whenever the relation between volume and time may be expressed by an algebraic equation, the first derivative of volume with respect to time, by differential calculus, gives the rate of displacement of volume, that is, velocity. (Article 269).

Let the equation between volume and time be written

$$Vo=K' T^n$$

then by differentiating once we obtain

$$Ve= K\ T$$

The rate of flow from the reservoir equals the time remaining multiplied by a constant, again assuming that physical condition of the orifice is constant throughout life. The equation shows straight line relation between the two functions. In Figure 236 its position is shown to lie above the parabola of pressure-time. In Figure 420 we may connect the points where the various curves touch the axes by straight lines, adjust the scale accordingly, and obtain the corresponding velocity-time curves. Or we may stretch the straight lines so as to suit any desired scale on the vertical axis.

This relation between velocity and time may also be derived from Torricelli's Theorem, written in our nomenclature,

$$Ve=K\ \sqrt{P}$$

and the time required to empty a vessel,

$$P=K\ T^n$$

by taking the square root of the latter and substituting the derived value of the square root of P in terms of T into the former. This is not an independent calculation. Torricelli's Theorem was used in obtaining the time required to empty a vessel, and this equation, in turn, was used in obtaining volume-time relations, and so on. We have merely completed a circle of calculations, checking back to the starting point.

The relative curve for velocity-time is shown in Figure 442. A parameter equal to unity fulfills the required condition that

$$\text{when } x=0,\ y=0$$
$$\text{and when } x=100,\ y=100$$

Area Under the Velocity-Time Curve

436. The statement was made in Article 256 that, no matter what shape the area under the velocity-time curve may have, each unit of area represents volume. But velocity and volume must be expressed in potential units in order that the total area may represent accurately the cumulative production from the reservoir.

Figure 436 shows typical velocity and volume curves for this control. The vertical scales as so proportioned as to bring their initial points together. This is only a matter of convenience, and not at all essential. Now the following equation may be written:

$$\frac{\text{Area ode}}{\text{Area oab}} = \frac{\text{Ordinate af}}{\text{Ordinate dg}}$$

This relation, in truth, holds similarly for any two curves of the parabolic type wherein the integration or differentiation of the equation for one gives the equation for the other. Here the equations happen to be

$$y=px \text{ and } y=px^2$$

It is to be observed that the area of the triangle oLI is one-half the area of the rectangle oLIJ. This is to say, the potential volume of a reservoir in this control, at any instant during the life of the reservoir, is equal to one-half the rate of flow at the instant multiplied by the time required to empty it. The same unit of time must be used in both functions; for example, when velocity is expressed in units of volume per minute, per hour, or per day, then life must be in minutes, hours, or days, respectively.

Acceleration-Time Relations

437. Whenever the relation between velocity and time may be expressed by an algebraic equation, the first derivative of velocity with respect to time gives the rate of change of velocity, that is, acceleration. (Article 28). When we say that the rate of production is decreasing by say, 2 gallons per hour, 100 cubic feet per week, or 100 barrels per month, we are speaking in terms of acceleration.

Since the equation between velocity and time is

$$Ve=K\ T$$

by differentiation we have

$$Ac=K$$

the equation of a straight horizontal line. The rate of flow from a reservoir of this control declines by a constant amount per unit of time.

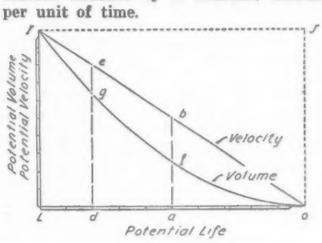


Figure 436

It is observed that the constant K in the two equations is the same constant. If we determine the value of K in the velocity-time equation for a particular reservoir, we have the amount by which production declines for each unit of time.

The equation for acceleration is, in reality,

$$Ac=K\ T^n$$

(Article 237). Although it is possible to construct the curve with acceleration as ordinates and time as abscissas, we are somewhat resricted in its use. We found this to be true with all horizontal lines in Hydraulic Control. Nevertheless, acceleration is of interest, perhaps more so in our analysis than in actual practice.

Acceleration can have any value within a range only limited by the physical characteristics of the reservoir with its orifice.

For future reference we shall place the line for accelation, 100 per cent, along the middle of Figure 442.

Analogous Equations

438. Our three equations for the potential functions of volume, velocity, and acceleration, with potential time, are analogous to three equations concerning bodies falling near the earth's surface. Let s equal the distance through which the body falls, g the value of the earth's acceleration, and t the time measured from the instant the body was at rest; then we have

$$s=\tfrac{1}{2}\ g\ t^2, \text{ to which corresponds } Vo=K\ T^n$$

The first derivative of s with respect to t gives v, the velocity of the body at the time t after it was at rest. Then we have

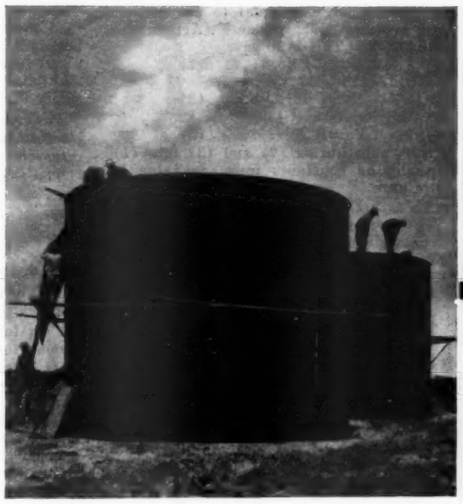
$$v= gt, \text{ to which corresponds } Ve=K\ T$$

Again, the first derivative of v with respect to t gives the value of a, the acceleration. So

$$a=g, \text{ to which corresponds } Ac=K$$

The connecting link between the two sets of equations is, of course, Torricelli's Theorem. Our laws for Volumetric Control are analogous to the laws for falling bodies. The laws for Capillary Control are distinct laws. (Article 84).

Strictly speaking, it is the body thrown upward which corresponds to the emptying of a reservoir. Both approach a point



Butler Bolted Tanks for the Texon Oil and Land Co., being erected just before the increased productions began

As the oil flows in—

On August 28th the newspapers carried mention of the increased production in Reagan County. They told their readers what was happening.

Before that time Butler Bolted Tanks were being put up by our dealer, the Drane-Humphrey Company, Big Lake, Texas, in this field. As the oil flowed in, the storage tanks were ready. Butler was on the job—on time—as usual!

Butler Bolted Tanks go up!

Above is a photograph taken as the tanks were going up. Behind these tanks and also to the right are more Butler Bolted Tanks!

Butler Bolted Tanks not only get on the job quickly but are dependable. They stay up after they are erected!

The exactness of our tanks is due to exacting construction. It is not dependent on human hands or brains. Giant machines take care of the perfect fit of sheets. That's why Butler Bolted Tanks are vapor-tight.

You can depend on Butler Bolted Tanks and Butler dealers. Let us send you further details.

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From K. C. Star

as follows: J. W. McCulloch, in township 1 north, range 1 west; J. W. McCulloch, in township 4 north, range 3 [illegible], H. W. Venable, section [illegible], Texon Oil Company, in section 32-3n-3e, and a block in township 2 north, range 2 west, north of Elmore City.

REGAN COUNTY OUTPUT INCREASED.

SAN ANGELO, TEX., Aug. 27.—Increase in Regan County oil production at least to forty thousand barrels by the end of the week was in prospect today with Texon Oil and Land Company group one No. 20 and Big Lake Oil Company's No. 40 flowing seventy and fifty barrels hourly, respectively, with five other inside wells drilling in. Texon No. 20, section 36-9, struck the pay at 2,880 feet and was to be deepened to 2,910 or 2,915 feet. Big Lake No. 40 in section 17-1 offsetting Texon No. 20, was drilling at 2,879 feet in the sand. Two flows had been made by Texon No. 12, section 36-9. Texon No. 17 was drilling in the sand at 3,004 feet, and No. 19 is due in Friday. These two wells are along the north line of section 36-9. Big Lake No. 34 was drilling at 2,927 with the hole full of oil, containing much paraffin. Both it and No. 20 are due to be completed by Saturday night.

Another Ripley Pipe Line.

TULSA, OK., Aug. 27.—Shaffer Oil and Refining Company has started laying a [illegible]-inch pipe line from its refinery at Cushing, Ok., to the Ripley district where it will connect with properties of the [illegible] section 5-18-4e and virginia. The

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May Tank & Supply Co., at Casper and Salt Creek, Wyoming.
M. A. Trimmer, at Blackwell, Oklahoma.
Wilson Tank & Culvert Co., at San Antonio, Texas.
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Continental Supply Co., at Kevin, Montana.
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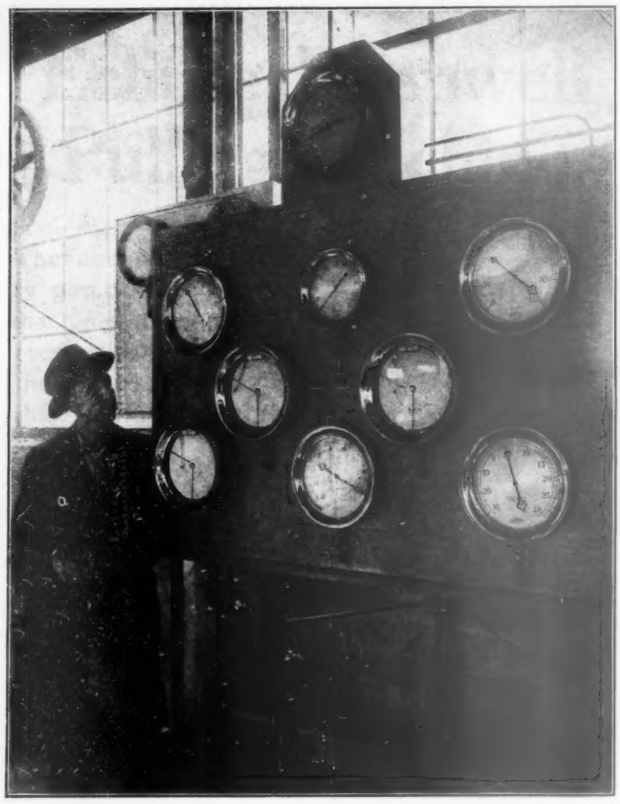

One of Twenty

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THE COMPASS OF INDUSTRY

of equilibrium when t=0. Precisely at this point the direct analogy ceases, because the body, being unsupported, falls to the earth, whereas the reservoir remains at rest in its state of equilibrium.

Energy-Time Relations

439. Energy is equal to the product of pressure and volume. (Article 262 and 263). This is to say,

$$E=K\,PVo \quad \ldots\ldots(1)$$

By Article 417 we have

$$P=K\,T^{a} \quad \ldots\ldots\ldots(2)$$

And by Article 433,

$$Vo=K\,T^{c} \quad \ldots\ldots\ldots(3)$$

By substituting (2) and (3) into (1), combining constants into one value K, we have

$$E=K\,T^{4} \quad \ldots\ldots\ldots(4)$$

The energy possesed by a fluid within a reservoir of this control varies as the fourth power of time remaining.

Our main interest in question (4) is in connection with combination reservoirs. (Article 265). Before entering into the discussion of gas production with liquid, it is necessary that we analyze the mechanics and primary functions of a combined type reservoir of this control.

For the relative curve between energy and time, a paramter equal to

$$\frac{1}{1000000}$$

(one divided by one milion) fulfills the requirement that

when x=0, y=0
and when x=100, y=100

The curve is shown in Figure 442.

Power-Time Relations

440. Power is equal to the product of pressure and velocity. (Article 266). This is to say,

$$Po=K\,PVE \quad \ldots\ldots(1)$$

By Article 417 we have

$$P=K\,T^{a} \quad \ldots\ldots(2)$$

And by Article 435,

$$Ve=K\,T \quad \ldots\ldots(3)$$

By substituting (2) and (3) into (1), combining all constants into one value K, we have

$$Po=K\,T^{a} \quad \ldots\ldots(4)$$

The power with which fluid leaves an orifice of a reservoir of this control varies as the cube of time remaining.

Equation (4) may also be obtained from energy-time equation of the preceding article. Power is defined as the relation between energy and time may be expressed by an algebraic equation, the first derivative of energy with respect to time gives the rate of displacement of energy, or power. By differentiating

$$E=K\,T^{4}$$

we obtain

$$Po=K\,T^{3}$$

This method of obtaining the formula indicates to us the relationship existing between areas under the power-time curve. (Article 436).

The entire area under this cubic parabola is found, by calculus, to be one-fourth of the rectangle enclosing it. Therefore the entire energy possessed by fluid in a reservoir, at any instant during its life, is equal to one-fourth of the power being delivered by it at the instant multiplied by the time required to empty it.

Power-time relations are of particular interest in connection with combination reservoirs. (Article 268).

The relative curve is shown in Figure 442. The required parameter has the value of

$$\frac{1}{100000}$$

(one divided by ten thousand).

The Primary Function Curves

441. In the preceding articles we have the six fundamental primary function relations for Volumetric Control. (Article 8). A comparison of the curves with their corresponding ones in Hydraulic Control is of interest. It can hardly be said that there is, in the present control, a monotony of style in the formulas and graphs. Time, instead of being infinite, is now finite as time remaining, and all quantities with which we deal are now finite in magnitude. (Article 62). Formerly we had time appearing in the zero and first powers; now have it in the zero, first, second, third and fourth powers.

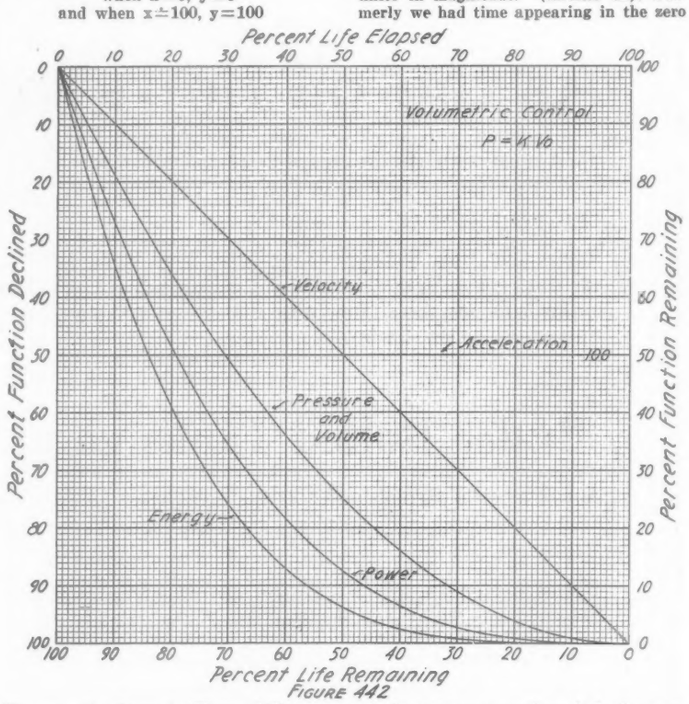

FIGURE 442

The three horizontal axes for curves, so thoroughly discussed in conection with Hydraulic Control, exist likewise in the present control. With respect to the curve, these axes are determined by

a) The potential zero,
b) The atmospheric zero, and
c) The absolute zero.

To make progress, we have assumed their acceptance.

The equilibrium which the reservoir establishes by flow from the orifice is represented by a point necessarily on the potential axis. The position of this axis is determined by the constant back pressure. The only axis of the three not subject to change in position is the absolute axis.

The potential axes for the six fundamental curves will be spaced at different distances from the absolute axis, unless the scales on the vertical axis are appropriately chosen. It is not essential that this be done, but it is important to note that it can be done.

The Relative Curve Chart

442. It is convenient and advantage-

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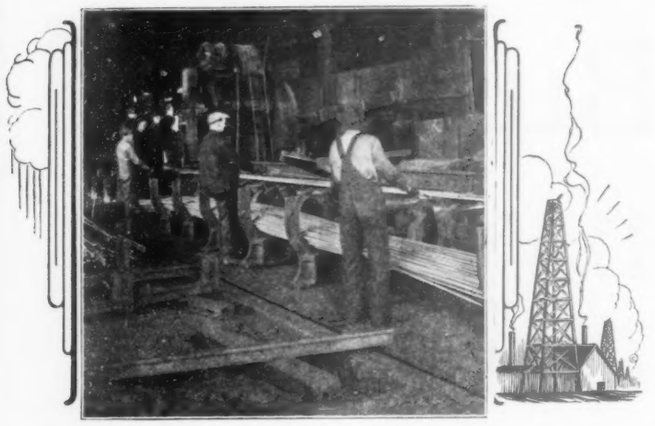

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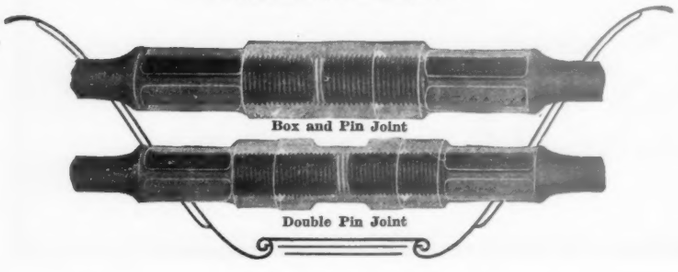


ous to place all the relative curves upon the same plat. This requires that they be placed on the same horizontal axis. We have made an appropriate selection of vertical scales for this very purpose when we have chosen percentage scales. The location of the zero on the horizontal scale would fall at the same point for all the curves with any scale, because this axis represents time in all cases; and whether this function be expressed in minutes, days, months, years, percentage, or any other suitable units, equilibrium is established for all primary functions of the reservoir at the same instant. A reservoir can not have, for example, potential pressure without potential volume, or potential volume without potential pressure. As long as any one of the potential functions exist, all others must exist, and as soon as any one of them reaches zero, all others must reach zero.

Figure 442 shows the combined Relative Curve Chart for Volumetric Control. All functions begin at 100 per cent and end at zero per cent.

Having made observations upon all functions of a given reservoir at some particular instant during its life, and having adopted this set of observations as representing standard conditions to use as the basis for comparison, we give all these functions a value of 100 per cent. From this instant onward, the full relative curve for each function is completed, provided the physical condition of the orifice remains constant (and we assume for the present that it is). Now we see that any vertical cut within the extremities of the chart shows at a glance the relative value possessed by each of the functions, compared with the value it had under standard conditions, for the instant represented by the vertical cut.

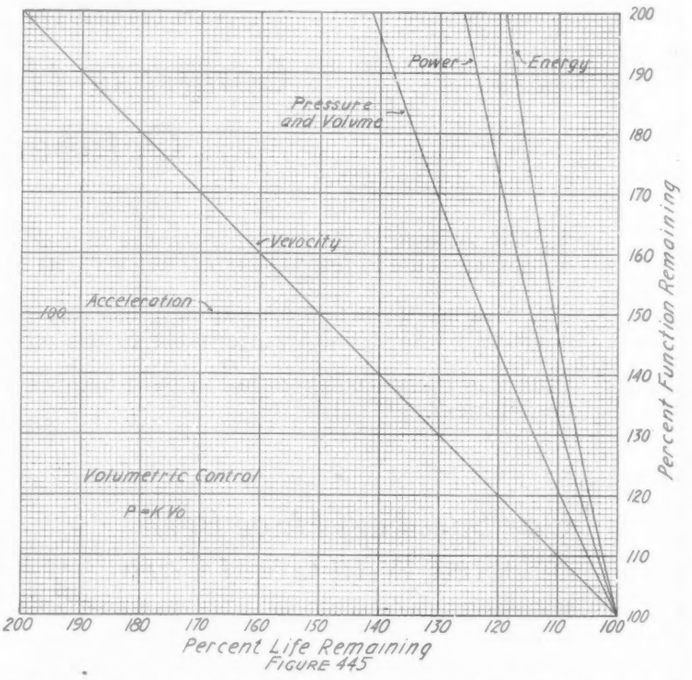


FIGURE 445

Geometrical Aspects of Decline

443. An inspection of Figure 442 shows that the higher the power to which T occurs in the primary formula, the more rapid is the decline of the curve leaving 100 per cent. But if the steeper curves are to reach zero, they must become the flatter ones at some time before zero. This also is shown on the chart. Suppose we give this principle a test.

Let us take a reservoir whose life is 100 days, and consider in connection therewith the functions of velocity and energy, which represent the extreme curves on the chart. Now the chart shows that for 37 days energy declines more rapidly than velocity. Thereafter it declines less rapidly; that is, for 63 days. We took standard conditions here as of 100 days.

Now let us wait 37 days before taking observations. We then find life to be 63 days, and we can adopt the observed conditions as standard for comparison. (Article 429). By the chart we see that energy now declines more rapidly than velocity for

$$37\% + 63 = 23.3 \text{ days}$$

and for the remaining time of 39.7 days it declines less rapidly.

Again, let us wait until the expiration of 60.3 days before taking the observations for standard conditions. Life we find is 39.7 days, and by the chart we see that energy now declines more rapidly than velocity for

$$37\% + 39.7 = 14 \text{ days}$$

and for the remaining time of 23.7 days it declines less rapidly.

Thus we may continue to the end of the life of the reservoir. We start out by saying that if the curve is steeper in the beginning, it must be flatter before zero is reached; yet for any instant during life we may choose standard conditions, there is a certain period thereafter when the function to the higher power of T declines more rapidly than the lower one. Here we appear to have a paradox. How can it be explained?

Whether a function declines more rapidly or less rapidly than another depends upon the location of standard conditions on the time axis.

We can not judge properly the features of a reservoir upon whether a function declines more rapidly or less rapidly than another. We can judge properly upon whether one curve lies under or over another. Thus we frequently specify, for purposes of comparison, that vertical lines be chosen so the initial points fall together; for example, in Figure 236.

If we would understand decline, we must understand its significant geometrical aspects.

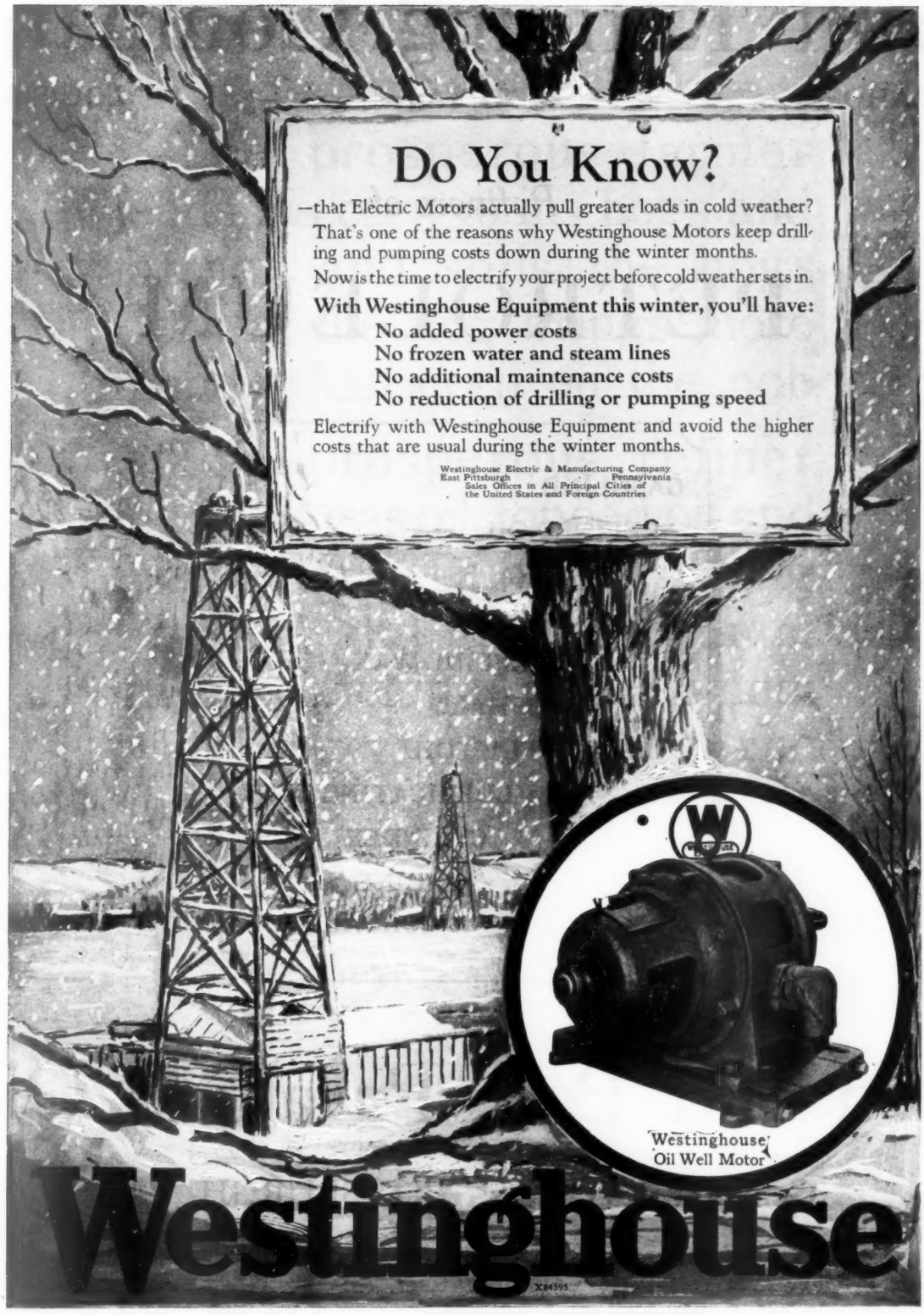
Area Under the Pressure Curve

444. Attempts have been made at times to introduce reservoir calculations based upon the area under the pressure curve. What can such an area represent?

For reservoirs of this control, we have seen that the exponent for T in the formula

for acceleration is 0
for velocity is 1
for volume and pressure is....2
for power is 3
and for energy is.....4

Each formula is obtainable from the one preceding by the process of integration, or from the one following by the process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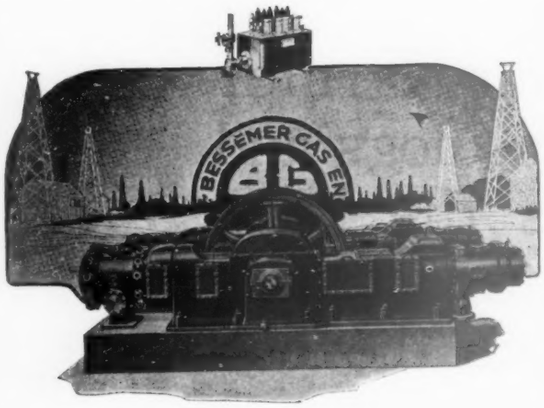

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of differentiation. The area under each curve bears the same relation to the ordinate of the one following as we found in the specific cases of velocity and power in Articles 436 and 440. So we may say that

(a) The area under the acceleration curve represents units of velocity,

(b) The area under the velocity curve represents units of volume or units of pressure,

(c) The area under the volume or pressure curve represents units of power, and

(d) The area under the power curve represents units of energy.

Thus, when we reckon with the area under the pressure curve, we are dealing with power. Pressure multiplied by time is power,—but this is true only for reservoirs of Volumetric Control.

We may use the areas under pressure curves, if we wish, in calculations upon the gas which is being produced from a combination reservoir

Extension Relative Curves

445. If we wish to compute the functions of a reservoir for some instant previous to that whose conditions we have adopted as 100 per cent standard, obviously such functions will be expressed in percentages greater than 100. It is possible to use the chart of Figure 442 even under such circumstances, by arbitrarily changing the standard in the course of solving a given problem. (Article 429). Such a method may lend to confusion at times; therefore we might improve matters by simplifying the computation.

Our formulas for the relative curves have no limits. We can substitute percentage values greater than 100 into them, in order to obtain points for the curves lying upward to the left of 100 per cent. The parameters remain the same as before. Thus is obtained Figure 445. The frame in which these curves lie touches Figure 442 at the latter's upper left-hand corner.

It is of interest to note that the curves reverse their relative positions upon passing through the 100-100 point. This is a geometrical feature which conforms to the mechanics of our reservoir problems.

Suppose, in the problem of Article 426, we had chosen the conditions at 4 p. m. as 100 per cent, and wished to compute the time at which the pressure was 50 units. Then

$$\frac{50}{32} + 100\% = 156.2\% \text{ pressure}$$

In Figure 445, 156.2 per cent pressure corresponds to 125 per cent of life. The life at 4 p. m. is

$$16 \text{ hours} = 100\%$$
$$\text{so } 20 \text{ hours} = 125\%$$

The time at which the pressure amounted to 50 units preceded 4 p. m. by 4 hours.

Three of the extension curves leave the frame of Figure 445 at early points. When necessary, we can extend these into the next frame lying above the present one.

446. Thus far we have only discussed the behavior of the type reservoirs under conditions which we may describe as ideal. The geometrical properties of both types were perfect, so far as circumstances required, and the physical condition of the orifice remained constant throughout life. The curves of Figures 442 and 445 represent Ideal Performance for these reservoirs. Each of the curves represents all curves of its kind for the infinite number of tanks possible of construction in accordance with the description of the types.

The particular use which we have for these relative curves is in connection with Theoretic Performance. For this reason we have not attempted to fully illustrate their use at the present time.

The next installment continues with the discussion on Volumetric Control Reservoirs.

CENTRAL WEST

(Continued from Page 54)

farm, Section 5, pumped 20 bbls., with top of sand at 1,320 feet and oil at 75 feet in. In Cass Township, same county, the Ohio Oil Co.'s No. 15 well 1,500 feet from the north line and 500 from the east line of the P. C. Redfern farm, Section 9, pumped 10 bbls. Top of Trenton at 1,119 feet and bottom of hole 1,469 feet, or 350 feet in the sand.

Near Cygnet, in Bloom Township, Wood County, the Ohio Oil Co.'s No. 21 on the Cornelius Slike, better known as the Jonas Moyer farm, and in the southeastern corner of the lease, pumped 6 bbls. the first 24 hours. Top of Trenton at 1,050 feet and drilled 596 feet in the sand. This well is located on the one-time famous "Hog's Back or Sucker Rod Belt," Section 6. In the same township, the same company's No. 18 well near the northwest corner of the E. H. Monasmith farm, Section 28, pumped 12 bbls. Top of sand at 1,311 feet and drilled 251 feet in to a total of 1,561 feet. In the same township, Clark A. Browning's No. 34 on the northwest corner of his own farm, Section 19, pumped 3 bbls. Sand found at 1,150 feet and drilled 250 feet in.

In Middleton Township, Wood County, the Waterville Gas & Oil Co.'s No. 9 well, 785 feet from the south line and 1,040 from the east line of the August Sheller farm, in River Tract 50, Section 16, pumped 20 bbls. Top sand at 1,213 feet and oil 100 feet in. In Perrysburg Township, same county, John E. Welton and others' test on the northeast corner of the Isaac Whitson farm, Section 22, was dry; sand at 1,263 feet and drilled 90 feet in, with no showing of oil or gas.

In Logan Township, Auglaize County, Lang & Murphy's No. 17 well, 2,200 feet from the north line and 700 feet from the east line of the James H. Gochenour farm, Section 3, pumped 12 bbls. Sand at 1,175 feet and oil at 45 feet in.

Indiana

But one well was reported from the Indiana fields during the week and that was in the Sullivan district, in the southwestern portion of the State. It was the William C. Kennedy Co.'s No. 4, on the northwest corner of the J. B. Kaufman farm, in the northeast quarter of the northeast quarter of Section 16, Gill Township, Sullivan County, and was a dry hole at a depth of 812 feet.

Illinois

Nothing startling was developed in the Illinois fields during the week but the big well on the Stillwell farm, in the Allendale Field of Wabash Township, Wabash County, is still the topic of oil circles. Numerous locations have been staked out surrounding the big producer, but it will require a number more wells drilled to discover whether the new pool will cover any wider area than other pools found in various parts of the same township.

In Wabash Township, Wabash County, the Adams Corner Oil Co.'s test 200 feet from the south line and 2,500 feet from the west line of the M. Madden farm, in the northwest quarter of Section 7, struck a gas volume of 1,000,000 feet at a depth of 1,187 feet, but drilled to a total depth of 1,551 feet in hopes of finding an oil pay, which failed to materialize and the gas may be utilized for fuel for nearby drilling. The Weidner Oil Co.'s No. 4 well 2,000 feet from the north line and 809 feet from the west line of the Holson-Dorney farm, in the southwest quarter of Section 18, developed into a duster at a depth of 1,561 feet. The dry hole on the Madden farm is about a mile southeast of the big well on the Stillwell farm.

In Martinsville Township, Clark County, John T. Smith and others' No. 3, on the northeast corner of the T. J. Ramsey farm, in the northwest quarter of Section 31, is reported good for 35 bbls. from the Niagara lime at 1,580 feet. In Parker Township, same county, R. E. Moffitt and others' No. 5 on the Briscoe heirs farm, Section 32, pumped 2 bbls. from the shallow Casey sand.

In Montgomery Township, Crawford County, Henry C. Lloyd and others' No. 5, in the southwest corner of the Mary Duncan farm, Section 21, pumped 20 bbls. at 959 feet. The National Refining Co.'s No. 16 C. A. & W. L. Dickinson farm, Section 15, pumped 1 bbl. at 971 feet.

Seventeen completions are reported

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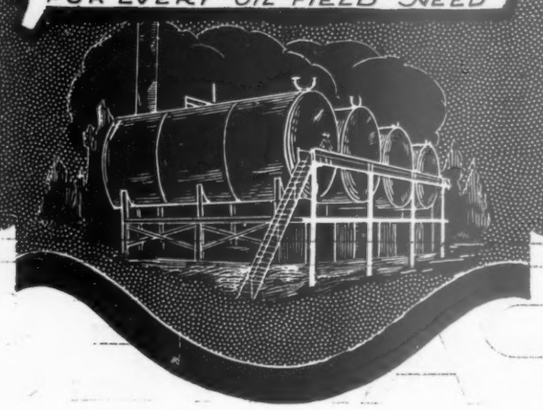
FOR EVERY OIL FIELD NEED



from the Central Ohio Field of which one is an oil well with a production of 3 bbls., seven are dry holes and nine are gas wells. There were 18 new locations staked out and 21 new wells started drilling, which means that the drill will be kept moving along steadily for a long time to come.

In Ashland County, Hanover Township, the East Ohio Gas Co. drilled a dry hole in a second test on the H. Bookman farm, Section 16. The Logan Gas Co. has drilled a test on the southwest corner of the E. Kick 40 acres, Section 23, and drove a stake for a test 625 feet from the east line and 900 from the north line of the Mary Beary 98 acres, Section 21.

In Green Township, Ashland County, the Logan Gas Co. drilled in a nice gas well at a second test 1,240 feet from the south line and 857 feet from the east line of the P. C. Cowen 350 acres, Section 21. Location has been made for No. 3, 786 feet from the south line and 988 feet from the west line, while No. 4, same farm, is located 564 feet from the north line and 153 feet from the west line. In the same township, the same company has a duster in a second test on the Martha Bowen farm, Section 28.

Ashland County

In Orange Township, Ashland County, the Logan Gas Co.'s test on the J. J. Brown farm, Section 6, is a dry hole. This company is drilling No. 2 on the H. B. Wertman 127 acres, Section 3, and No. 1 on the Floyd Shaum 104 acres, Section 3, while it made a location for a second test 875 feet from the north line and 630 feet from the east line of the J. R. McConnell 87 acres, Section 4. Ohio Fuel Gas Co. set a stake for a test 640 feet from the north and west lines of the L. M. Helbert 160 acres, Section 4, while Hulse & Kundtz have started the drill at a second test near the northeast corner of the E. E. Markell 26 acres, Section 9. In Greene Township, the Ohio Fuel Gas Co. is drilling a second test on the northeast corner of the Maurer & Covert 111 acres, Section 22.

The Klise-Eckstein-McCann Co. is preparing to start a wildcat well 593 feet from the south line and 401 feet from the west line of the S. Sponsler 24 acres, Section 1, Troy Township, Ashland County. Should this prove either an oil or gas producer it will add a large area to the field.

In Chatham Township, Medina County, the E. R. Edson & Sons Co.'s No. 22, on the Carl G. Packard farm, Lot 4, is showing for 3 bbls. In Homer Township, the Ohio Fuel Gas Co. is drilling a test on the D. Wandell 53 acres, Lot 8. In Harrisville Township, Hulse & Kundtz drilled a light gas well in a test on the John Mapes 10 acres, Lot 80. Same firm is drilling a test on the northwest corner of the Frederick Baker 53 acres, Lot 1, York Township. In Liverpool Township, the Ohio Fuel Gas Co. has an average gas well at a test in the northwest corner of the George Stoskopp 70 acres, Lot 3.

In Lorain County, Columbia Township, the Ohio Fuel Gas Co. brought in two excellent gas wells. Its test in the southeast corner of the J. F. Ring 117 acres, Lot 32, is one, while No. 2, located 300 feet from the south line and 1,050 feet west of No. 1 on the same farm, is drilling. Its No. 1 on the northwest corner of the G. and M. Hance 42 acres, Lot 34, is the other. Same company is drilling a test on the southwest corner of the Marion B. Jasper 20 acres, Lot 33. The Logan Gas Co. is drilling No. 1 on the William Rundel 50 acres, Lot 87, and No. 2 on the Sylvia A. Ives 179 acres, Lot 74.

In Wayne County, Wayne Township, William Hawk and others have an average gas well at a test on the northeast corner of the Jay Yoder 40 acres, Section 1. In Faint Township, the Ohio Fuel Gas Co. is drilling a test on the Isaac Y. Miller 160 acres, Section 5. In East Union Township, the Logan Gas Co. made a location for a test in the northwest corner of the W. T. Jacot 55 acres, Section 22.

In Holmes County, Monroe Township, the Ohio Fuel Gas Co. is drilling No. 3 on the B. F. Uhl 100 acres, Lot 15, and the Empire Gas & Fuel Co. is drilling No. 1 on the Newton Lowe 139 acres, Lot 3. In Hardy Township, the East Ohio Gas Co. is drilling No. 3 on the northeast corner of the Harriett McCullough 85 acres, Lot 30.

In Athens County, Carthage Township, the Logan Gas Co.'s No. 5 well 1,350 feet from the north line and 245 from the east line of the M. Kinnon 40 acres, Section 30, was dry in the Keener sand. Snodgrass and others' No. 1 on the F. E. Clark, Section 18, found 70 feet of Berea sand at a total depth of 1,810 feet, and dry. Carter Oil Co. has a duster at a test on the J. R. Murphy farm, Section 8. In Rome Township, the Muskingum Gas Co. struck a duster on the G. W. Connell 76 acres, Section 23, in the Maxon sand at 1,109 feet. The Logan Gas Co. made a location for a second test 866 feet from the north line and 560 feet from the east line of the P. T. and M. A. Burch 108 acres, Section 23, and the Ohio Fuel Gas Co. is drilling a second test on the southwest corner of the P. D. Patton 18 acres, Section 2. In Waterloo Township, the Logan Gas Co. made a location for a test 450 feet from the north line and 900 feet from the east line of the Isaac Hudnell 83 acres, Section 1.

In Ross County, Colerain Township, the Waring Oil Co. went to a depth of 560 feet into the Trenton Rock at a test on the Amos Brown farm, Section 6, and was rewarded with a dry hole. Salt water was encountered in the Trenton.

In Newcastle Township, Coshocton County, the Logan Gas Co.'s test on the J. W. Fraizer farm, Section 12, struck 12 feet of Berea sand and got a good gas pay. Same company located No. 4 on the northeast corner of the William Ringewalt 207 acres, Section 7, same township. In Perry Township, same county, the Logan Co. set a stake for a wildcat 1,125 feet from the north line and 1,815 from the east line of the E. Ray and Otto M. Van Winkle 187 acres, Section 15.

Cuyahoga County

In Dover Township, Cuyahoga County, near Cleveland, the East Ohio Gas Co. drilled deeper its No. 1 on the J. D. Wagner farm, Lot 78, and got a small gas producer. In the same township, G. Dempsey is drilling a test in the northwest corner of the C. C. Wise 16 acres, Lot 19. In North Olmstead Villagoe, same county, McGraff and others are drilling a test on the F. Sanders 6 acres, Lot 19.

In Adams Township, Guernsey County, the Logan Gas Co. is drilling No. 1 M. B. Oliver farm, Lot 18, and made a location for a test near the southwest corner of the M. K. Wells 188 acres, in the southwest quarter of Lot 3.

In Bucks Township, Tuscarawas County, the Logan Gas Co. located a wildcat test 1,050 feet from the south line and 700 from the east line of the E. P. Mizer 180 acres, in the northeast quarter of Section 22.

In Berne Township, Fairfield County about 3 miles southeast of Lancaster, the City Natural Gas Works of Lancaster, is drilling a test 480 feet from the north line and 1,245 feet from the west line of the G. C. Peters farm, Section 16.

About 12 miles almost due east from Gambier College, in the northeast corner of Butler Township, Knox County, the Upham Gas Co. is drilling an important wildcat well on the northeast corner of the George W. Criss 134 acres. Its location is several miles to the south of Brinkhaven and it is being closely watched as a producer of either oil or gas means much for that extreme eastern portion of the county.

In Jefferson Township, Knox County, in the Brinkhaven area, the Ohio Fuel Gas Co. is drilling a test on the Rilla Rabjohn 53 acres, Section 8, about 3 miles north and 3 miles west of Brinkhaven. No. 2 well has been located 1,250 feet from the south line and 300 feet from the west line of the same farm. Near the center of the same township, the same company made a location for a test 1,050 feet from the north line and 300 feet from the east line of the J. Rowland 40 acres, Section 4, also staked a

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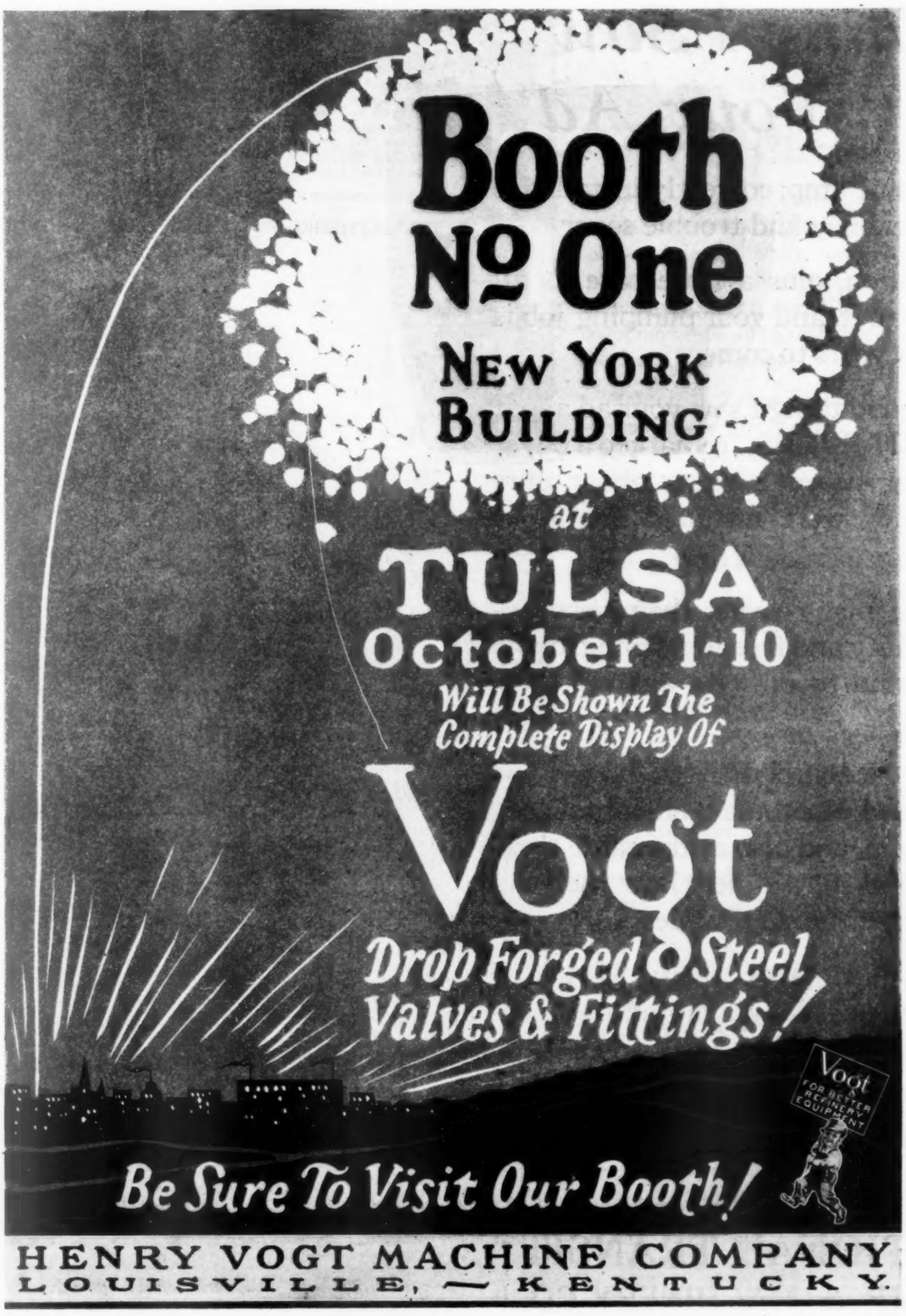
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location for a test on the R. W. Mowery, Section 13. James E. Greer is drilling a test on the Jacob Greer farm, Section 14, same township.

In Brown Township, Knox County, the East Ohio Gas Co. made a location for a second test on the J. Moser 85 acres, Lot 33.

Offside Development

Goldfish and others' test 535 feet from the north line and 400 feet from the east line of the L. A. Lubrand 70 acres, in Fractional Lot 733, Barlow Township, Washington County, was dry in the Big Injun sand at 1,525 feet.

Logan Gas Co. made a location for a test 1,020 feet from the north line and 495 feet from the west line of the D. W. Johnston 132 acres, Section 26, Decatur Township, Washington County.

In Falls Gore Township, Hocking County, Jack Walters and others' second well on the Hocking Fuel Co. lease, Section 36, is reported at 25 bbls. after a shot. In the same township, Wallsmith & Kinstle's No. 1 Laura E. Tilton farm, Section 29, is a duster. In Washington Township, same county, the Gray Stone Oil Co. is drilling a test on the George Miller farm, Section 11.

The Kachlemacher estate is starting No. 5 well 300 feet from the south line and 720 feet due west of No. 4 well on the Gardner & Ellis farm, in the northwest quarter of Section 35, Coal Township, Perry County.

In Barlow Township, Washington County, Barnett and others struck a light gas well at a test on the Henry Woodburn farm. This well was dry in the Maxon sand but found its gas pay in the Maxburg sand at 1,215 feet.

OIL GATHERED BY TEXAS PIPE LINES DURING JULY, 1925

County. Field or Station.	Total Bbls. (Field)	Total Bbls. (County)
Archer—Clark-Harmel	21,555.24	
Davis-Hausler	11,298.75	
Ferguson	31,387.24	
Freeman-Wilson	76,330.24	
Megargel	57,604.90	
Parrish	13,581.97	
Swastika	10,250.58	
Wilmot	56,694.46	278,703.38
Atascosa—Somerset	8,440.55	8,440.55
Bexar—Somerset	9,809.02	9,809.02
Brazoria—Damon Mound	30,546.12	
West Columbia	320,826.75	351,372.87
Brown—Byrd	7,098.71	
Cross Cut	72,452.90	79,551.61
Callahan—Putnam	97,287.38	97,287.38
Caldwell—Oilfield	2,078.34	
Dale	164,826.91	
Lytton Springs	110,542.55	277,447.80
Carson—Burnett	39,398.90	39,398.90
Chambers—Barber's Hill	1,664.87	1,664.87
Clay—Petrolia	4,306.48	4,306.48
Coleman—Coleman	349.68	349.68
Comanche—Copperas Creek	5,962.06	
Desdemona	10,868.87	
Peak	23,386.46	40,217.39
Eastland—Colony Creek	242,796.60	
East	7,346.16	
Fleming	31,016.34	
Harrell	7,896.81	
Henson	20,977.18	
Pioneer	11,347.73	
Tiffin	5,595.06	326,975.88
Falls—Chilton	815.82	815.82
Fort Bend—Big Creek	25,177.39	
Blue Ridge	21,831.28	47,008.67
Freestone—Colonels	115,433.61	
Mexia	213,998.70	
Simmons	85,427.41	
Wortham	506,234.96	921,094.68
Galveston—High Island	18,387.45	18,387.45
Harris—Goose Creek	267,825.43	
Humble	145,351.09	
Pierce Junction	10,664.32	423,840.84
Hardin—Batson	32,478.84	
Saratoga	28,174.69	
Sour Lake	118,359.65	179,013.18
Jack—Hensley	7,809.77	7,809.77
Jefferson—Spindle Top	33,225.08	33,225.08
Liberty—Dayton	1,474.58	
Hull	566,805.61	
South Liberty	570,446.87	1,138,727.06
Limestone—Boyd	86,968.14	
Colonels	196,796.63	
Groesbeck	1,071,870.89	
Mexia	660,187.30	2,015,822.96
McMullen—Calliham	10,300.00	10,300.00
Matagorda—Markham	2,194.30	2,194.30
Marion—Potters	2,915.20	2,915.20
Milam—Minerva	*24,457.94	*24,457.94
Mitchell—Westbrook	85,801.36	85,801.36
Navarro—Corsicana	36,274.10	
Colonels	242,180.11	
Currie	40,348.72	
Fleming	†141,668.74	
Kent	§148,518.07	
Powell	215,045.62	
Richland	4,693.20	§828,728.56
Orange—Cow Bayou	224,919.53	
Orange	271,866.74	
Terry	26,429.25	523,215.52
Palo Pinto—Graford	19,479.15	
Hobart	28,515.36	47,994.51
Reagan—Big Lake	902,714.31	
Kemper	627,866.87	1,530,581.18
Shackelford—Albany	3,639.00	
Moran	49,431.08	
Poindexter	35,316.14	79,386.22
Throckmorton—Ellasville	3,403.54	
Swastika-Davis	267,017.80	270,421.34
Stephens—Ackers	12,337.98	
Atkins	22,073.31	
Brazos	552.32	
Breckenridge	124,672.25	
Chaney	33,181.75	
Clear Fork	72,043.64	
Fambrough	40,832.06	
Harris	46,051.08	
Rogers	19,668.15	
Stephens	18,988.51	390,401.05
Young—Bend	30,286.17	
Bunger	41,966.72	
Jenkins	21,751.17	
Olney	193,703.03	287,707.09
Webb—Mirando	63,608.00	63,608.00
Wichita—Burkburnett	684,966.86	
Devol	49,116.74	
East Side	8,522.52	
Holliday	388,309.89	
Maxey	4,741.86	
Red	20,032.86	
Serrien	16,255.90	
Valley	32,343.40	
Zink	129.92	1,204,419.95
Willbarger—Vernon	250,712.03	250,712.03
Williamson—Thrall	1,671.43	1,671.43
Various—De Leon	66,474.86	
Electra	590,354.81	
Luling	572,074.05	
Pan-Tex	65,012.78	
Ranger	144,729.38	1,438,645.88
Total	13,344,432.88	13,344,432.88

*Month of June.
†Includes 46,807.26 bbls. month of June; 47,580.24 bbls. month of May.
§Includes 50,511.44 bbls. month of June; 51,548.14 bbls. month of May.

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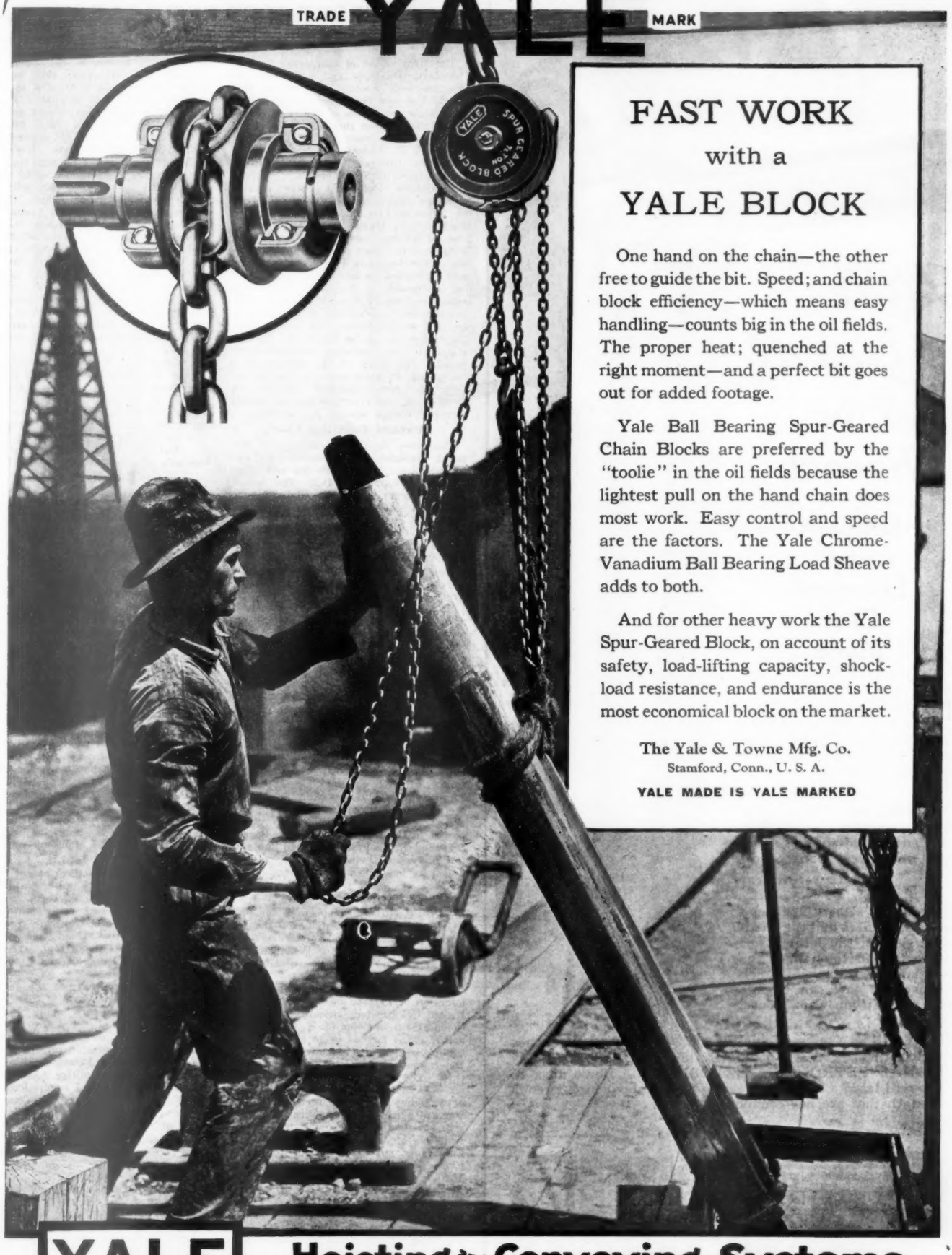

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TESTING MATERIALS COMMITTEES REPORT GOOD RESULTS OBTAINED

By L. M. Fanning

The 1925 report of Committee D-2 on Petroleum Products and Lubricants of the American Society for Testing Materials has just been issued, and a limited number of copies is available. They can be obtained by those interested from Dr. K. G. Mackenzie, of The Texas Co., or Dr. R. P. Anderson of the American Petroleum Institute, both making their headquarters in New York.

Committee D-2 held three regular meetings during the past year (in June at Atlantic City, in October in New York, and in March at Pittsburgh) and also an informal meeting at Fort Worth, Texas, at the time of the annual meeting of the American Petroleum Institute, which afforded an additional opportunity for discussion of the work of various sub-committees. Committee D-2 now has a voting membership of 37 producers and 39 non-producers and reports continued growth in the use of the various standards and tentative standards prepared. The work of the committee is constantly widening and growing in importance, and proposed changes in methods of test are receiving the closest attention on the part of the industry.

Abridged Correction Table

Contained in the report is the proposed abridged volume correction table for petroleum oils, which has now been adopted by Committee D-2. The American Petroleum Institute's advisory committee on testing methods and specifications for petroleum and its products worked for over a year on the problem of constructing this abridged table of multipliers for correcting the volume of petroleum products for temperature which would be satisfactory to the entire petroleum industry.

The table was finally agreed upon at a meeting of the committee in connection with the institute's annual meeting at Fort Worth, and subsequently adopted by the Bureau of Standards and prepared by it to meet a demand from the oil industry for a short and convenient table for reducing oil volumes on the basis of 60 degrees Fahrenheit (15.5 degrees Centigrade). It is based on the same data as Table 2, Bureau of Standards Circular No. 154, and is not intended to replace the more complete and accurate volume correction table contained in that circular, but rather to supplement it and especially to replace the various abridged tables and approximate correction factors heretofore employed in the oil industry. The Bureau of Standards has the abridged table in the process of printing and it will be issued as a supplement to Circular No. 154.

Methods of Test

Committee D-2 has approved for publication as tentative standards, the following proposed methods of test:

1. Method of Test for Penetration of Cup and Railroad Greases, submitted by Sub-Committee 4 on Grease.

2. Method of Test for Color Determination of Petrolatum by Means of the Union Colorimeter, submitted by Sub-Committee 6 on Color (I. K. Giles, chairman). This method is an adaptation of the present A. S. T. M Method for the Determination of Color of Lubricating Oils. The sub-committee is also working on a method of determining the color of wax, but is not yet prepared to recommend a method for publication.

3. Method of Test for Neutralization Number of Petroleum Products and Lubricants, submitted by Sub-Committee 13 on Neutralization Number and Saponification. (This is a substitute for the Tentative Method of Test for Free Acid in Lubricants (D 188—24 T)

4. Method of Test for Burining Quality of Long-Time Burning Oil for Railway Use, as submitted by Sub-Committee 19 on Illuminating Oil (J. B. Rather, chairman). The difficulties in the way of the development of a method satisfactory to every one were discussed in the 1924 report of the committee, and are too well known to require further comment. Nevertheless, the sub-committee felt that the only way to make progress would be to prepare a method which, upon publication, would serve as the basis for criticism. The principle of the method is fixed oil consumption and not fixed burning time. Under the conditions specified the burning time will vary from 120 to 144 hours. The reason for this lies in the fact that with any specified nominal flame height, the oil consumption for any given period will vary with very small differences in flame setting and other burning conditions.

The point has been raised in connection with the wick specified in the test, that a center-core wick might produce different results. Through the courtesy of C. P. Van Gundy, the sub-committee was supplied with a number of these wicks, but was unable to discover any differences in results on the oils available for test.

5. Method of Test for Distillation of Natural Gas Gasoline, submitted by Sub-Committee 22 on Natural Gas Gasoline (Lloyd F. Bayer, chairman). The method follows where possible the wording of the present Tentative Method of Test for Distillation of Gasoline, Naphtha, Kerosine, and Similar Petroleum Products (D 86—24T).

Sub-Committees Report

The 1925 report also contains the reports of some of the sub-committees of Committee D-2 as follows: Sub-committees on wax, on grease, on sulphur determination and differentiation, on neutralization and saponification, on sampling and gauging, on crude petroleum and on calorific value of fuel oil. The report of the sub-committee on nomenclature, of which Dr. Mackenzie is chairman, is also presented. Dr. Mackenzie states that recommendations as to petroleum nomenclature are being made only after the fullest consideration and for this reason the widest possible criticism is solicited. It is the aim of the committee not to make any recommendations until it is pretty sure there will be no change.

The work of this committee has been going on for some time and good results are being obtained. Cooperation is being received from the Institution of Petroleum Technologists (London) and effort is being made to make definitions applicable to both American and British practice. If this is brought about it is thought that other countries will follow. The report of the sub-committee on nomenclature follows:

Report on Nomenclature

In the report of the sub-committee for 1924 certain definitions were published for information and criticism. These definitions have been critically reviewed by the Executive Committee of the Standardization Committee of the Institution of Petroleum Technologists, and many helpful suggestions have been received which have enabled the sub-committee to so revise certain of these definitions that they may apply both to American and English practice. The sub-committee wishes to express its appreciation of this cooperation on the part of the Institution of Petroleum Technologists. The sub-committee has also received certain editorial suggestions from the Editorial Committee of Committee E-8 on Nomenclature and Definitions, some of which the sub-committee has adopted and incorporated in the definitions here presented. The sub-committee again requests criticisms and suggestions in the matter of the definitions submitted. Two additional definitions have been incorporated, namely for "engine distillate" and "tops," and the definition for "mineral seal oil" has been omitted pending further consideration of a proper designation for this product.

The sub-committee wishes to call particular attention to the spelling of the word "kerosine." This matter was

(Continued on Page 152)

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Fig. No. 120

Steel Upper Valve—Lower end of body drilled and slotted bottom held in place with cotter pin.

Fig. No. 121

Steel Upper Valve—Lower end of body drilled, cup nut above perforated bottom, perforated bottom castellated and secured with cotter pin.

Fig. No. 122

Steel Upper Valve—Same as Fig. 120 except that it has a long thread on body above hexagon, with a lock ring to hold crown secure.

Fig. No. 124

Steel Upper Valve—The body and bottom are one piece, cup rings and cups being put on from the top; fishing neck on crown, and hexagon lock nut to secure the body, seat frame and crown; perforated bottom.

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DRILLERS RETURNED FROM PERSIA RELATE EXPERIENCES IN FIELDS

By Victor Lauriston

CHATHAM, Ont., Sept. 12.—After three years spent in the Persian fields, a part of Canadian drillers, including Capt. F. M. Fisher of Sarnia, Ont., and G. C. Dickerson of Chatham, have returned to Canada.

"The oil fields of Persia are the finest in the world, bar none," is the statement of Captain Fisher.

The field is controlled by the Anglo-Persian Oil Co., the controlling interest in which is in turn held by the British Government. Through the development of its wonderful oil resources during the past few years, Persia is beginning to cast off much of its ancient lethargy, and has joined to some extent in the march of modern progress. Oil derricks now lift their heads among the hills whose only sign of human activity had been the nomadic tribesman or the ruined altars of the fire worshipers. Across the silent plains which once resounded to the tramp of men at arms and the chariots of Alexander the Great pipe lines carry the rich stream of petroleum to the seaports where it is either refined or loaded into tankers and transported to the Llandarcy refinery in South Wales, near Swansea.

The first gusher was struck in Persia in 1908 by William K. D'Arcy, after several years of hard and at times very discouraging work. This well, known as the "F-7," is still producing, and has, it is claimed, produced more oil than any other well in the world. D'Arcy in 1901 had secured from the Shah of Persia an exclusive concession for the exploitation of natural gas, petroleum, asphalt and ozokerite throughout the Persian empire, except for five provinces along the Caspian Sea. The original concession was for five years.

Early Difficulties

The northern part of the concession was first exploited, and in 1904 two wells were brought in. The remoteness of the field from the Persian Gulf, however, made its proper development very expensive, and the production of the two wells being very limited, operations were proceeded with in other parts of the country. D'Arcy, who had made a fortune out of gold mining in Australia, had by this time spent hundreds of thousands of dollars of his own money, but did not become discouraged.

It was at this stage that D'Arcy was approached by German capitalists with a proposal to relieve him of the Persian concession. He could have sold out at a handsome profit. But he foresaw the great national value his concession might acquire in years to come and he resolved it should remain in British hands. In the light of the events that have taken place since the offer was made by the German financiers, it is easy to imagine what might have been if D'Arcy had sold his concession.

During the next few years after the German offer, different syndicates were formed to exploit the concession, but with indifferent success. Operations were uncertain in the southern part of the empire closer to the Persian Gulf. Finally the London headquarters became discouraged and sent word to Persia to discontinue drilling. The courier with the message was delayed, and before it was delivered the gusher, now known as well F-7, was struck, and D'Arcy's belief that a great oil field would be discovered was vindicated. Since that time the field has been steadily developed.

Depth of Wells

The wells in Persia, according to Mr. Dickerson, range from 1,000 to 3,000 feet in depth and every one is a gusher. The men in charge of the drilling rigs are Canadians. The skilled workers in the machine shops, the machinists, etc., are natives of India, while the common laborers are Persians. The natives of southern Persia are shiftless. Nothing ever worries them. You tell them how to do a thing once, and the next time they've got to do the same thing, you've got to give the instructions over again.

"I was located part of the time," said Mr. Dickerson, "in the Maildon-i-Naftun, or valley of oil; and for 18 months on Kishm Island, in the Persian Gulf. This is called the hottest place in the world. The thermometer never drops below 95 degrees and at times it is much higher. The humid atmosphere makes the situation much worse. From midnight until 9 o'clock in the morning the heat is almost unbearable. In the fields on the mainland the nights were cool. The valley in which we were located there is near the site of the huge temple called Masjid-i-Suliman, or Solomon's Temple.

"The company for which we worked furnished us with bungalows to live in and we were quite comfortable. These buildings were made of stone, the mason work being done by natives. These men, who are real mechanics in their line, although they erect stone buildings for the foreigners, would rather live in a hole in the side of a hill. They never erect stone houses for themselves. Our bungalow was situated about 1 mile from the sacred well, known as Chasi-Mali, and it is supposed to be where Moses tapped the rock.

"The natives are ruled by a tribal form of Government. They very seldom steal. This is due, perhaps, to the terrible punishment imposed for such a crime. A native caught stealing is given a sort of trial and sentenced to have one or both his hands or feet cut off; or perhaps to have one ear chopped off or eyes taken out. Generally their hands or feet are cut off. The idea appears to be, if the hands are cut off they cannot pick up anything, or if one or both feet are taken off, the thief will not be able to run again, therefore he will steal no more.

"Plotting against the leaders or chiefs of the tribe is punishable by death. The plotters are stood in holes up to their chins. Then a mixture, something like our plaster of Paris, is poured around them. This mixture sets like cement and the poor victims are left to die.

"The natives' food consists of mutton and a sort of barley cakes. They will not eat anything that we do for fear of touching some of the forbidden meats. Our food supplies, of course, were shipped from England. The Persians are great smokers, and are addicted to the use of opium.

"We left Persia on June 30 and traveled by motor to Basra on the Tigris River," said Mr. Dickerson. "From there we journeyed to Bagdad by boat, a 36-hour ride. From Bagdad we traveled across the Syrian desert to Berout, a 700-mile ride, starting at 3 o'clock in the afternoon and arriving at our destination at 7 o'clock the next night."

OIL COMPANY OFFICES REMOVED FROM HOUSTON

HOUSTON, Tex., Sept. 19.—The general offices of the Marland Oil Co. of Texas, a subsidiary of the Marland Oil Refining Co., Ponca City, Okla., will be transferred from Houston to Fort Worth, Tex., October 1. The offices have been located here since early in the year. The bulk of the company's operations is in the North-Central and Big Lake Fields and it is desirable that the officials be nearer the work.

The Marland Oil Co. of Mexico will be directed from Houston, and the offices of the Reagan County Purchasing Co., a subsidiary of the Marland of Texas, will remain here. The latter is the organization through which crude bought under contract from the Texon Oil & Land Co. and Big Lake Oil & Development Co. is handled and transported through the lines of the Humble Pipe Line Co. to terminals at Texas City, a port on Galveston Bay.

It is said the Humphreys Corp. will also move its offices from Houston to Fort Worth for the same reason as that of the Marland Co.

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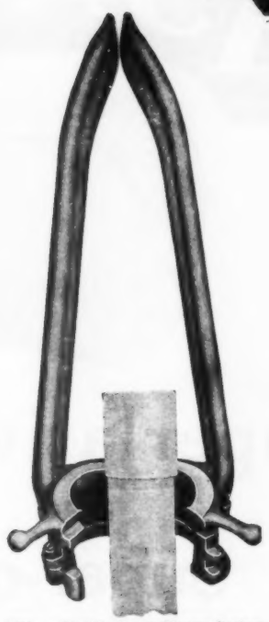
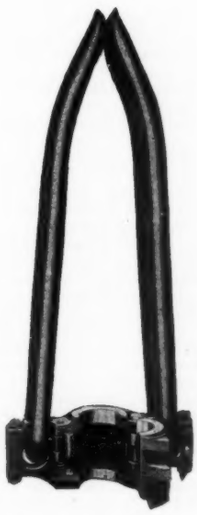


Wilson Double Extra Heavy Spring Latch Rotary Elevator

Wilson Extra Heavy Spring Latch Rotary Elevator



Wilson Extra Heavy Spring Latch Side Door Tubing Elevator

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DEPARTMENT OF JUSTICE STATES POLICY ON TRADE ASSOCIATIONS

By L. M. Fanning

The functions of trade associations in the compilation, dissemination and discussion of industry information and statistics within legal bounds have been greatly clarified in the recent Supreme Court decisions in the Maple Flooring Manufacturing Association and the Cement Manufacturers Association cases, and more recently by the principles that will be followed by the Department of Justice in dealing with trade associations and in determining whether they violate the anti-trust laws which have been laid down by Colonel William J. Donovan, assistant attorney-general in charge of anti-trust prosecutions. The oil associations, as well as organizations in other industries, have been more or less in the dark on some of the questions which now seem to have been settled so far as the attitude of the present attorney general's office is concerned.

After several years of effort on the part of Secretary of Commerce Hoover for a workable interpretation to guide trade associations, which organizations he has recognized as an essential part of modern business administration, rules have at last been laid down by the Department of Justice which are understandable and which give the oil associations an opportunity to proceed along lines where formerly they have refrained from doing so because of the fear of their actions being interpreted as violating the law.

Department of Justice View

The principles now laid down by Assistant Attorney-General Donovan have been approved by Attorney-General Sargent and by Secretary Hoover. They were contained in Colonel Donovan's address before the American Bar Association meeting in Detroit recently. One of the important parts of his statement relates to the permissibility of a trade association meeting for discussion of information and statistics as stated in the Maple Flooring Association case. This feature of the decision was pointed out in The Oil and Gas Journal, issue of August 6, when the possibility of an oil association calling a meeting to discuss statistics bearing on over-refining with a view to curtailment by individual plants was discussed.

Colonel Donovan states that the court's ruling permitting members of associations to "meet and discuss" information and statistics is particularly susceptible of abuse and warns organizations against overstepping their new found freedom. Referring to the Maple Flooring and Cement cases Colonel Donovan says:

"In the argument before the court in these cases the Government contended that the mere collection and dissemination of statistics brought the cases within the principle of the hardwood lumber and linseed oil cases, and that the plan employed was inherently illegal in that it had a direct tendency to impede the economic laws of supply and demand and to stifle competition.

"The Maple Flooring case and the Cement cases were almost alike in their facts. Both disclosed a very elaborate system for gathering and disseminating statistical information. In its opinion the court found that there was no proof in the record as to the improper use of such statistics or of any agreement among members of the association by concerted action to fix prices and to curtail production or otherwise restrain trade."

Quotes From Decision

Mr. Donovan then quotes the decision of the court as follows:

"We decide only that trade associations or combinations of persons or corporations which openly and fairly gather and disseminate information as to the cost of their product, the volume of production, the actual price which the product has brought in past transactions, stocks of merchandise on hand, approximate cost of transportation from the principal point of shipment to the point of consumption, as did these defendants and who, as they did, meet and discuss such information and statistics without, however, reaching or attempting to reach any agreement or any concerted action with respect to prices or production or restraining competition, do not thereby engage in unlawful restraint of commerce."

Explaining that the Government has filed petitions for rehearings in the two cases Colonel Donovan goes on to say that the principles laid down by the court are not challenged. Their purpose, he says, "is merely to point out facts contained in the record which, accepting the principle of the court's opinion appear to require a different result."

Show Changed Attitude

The Colonel Donovan says:

"The significance of these petitions is not generally realized by the bar of the country. They are significant because they evidence a decided change in the attitude of the Department of Justice toward trade associations and their activities.

"In this change of attitude, however, there is no loss of recognition of the fact that manifest evils may result either from an honest misinterpretation of these decisions or from a deliberate perversion in order to have respectability lent to activities which the court will never countenance.

"In these decisions the court has indicated certain rights to be enjoyed by these associations in their lawful pursuits. At the same time, however, it has affirmed the doctrine laid down in previous cases in which the abuses involved in the interchange of business data is condemned.

"These condemnations include secrecy in the use of information; fraud in the compilation of statistical data; concerted action based upon such data; distribution of identified information—that is identifying the figures of each competitor; the interchange of quotations and other information leading up to sale.

"While the court in the present cases also condemns those enumerated practices, it does permit members to 'meet and discuss such information and statistics;' the privilege thus granted is particularly susceptible of abuse, even though the court limits it by stating that they may do this only provided that they do not reach or attempt to reach 'any agreement or in concerted action with respect to prices or production, or restricting competition.'

Warning Against Abuse

"Those interested in the development of the trade associations as well as officers charged with the duty of enforcing the law must be alert to see that association members in the enjoyment of their new freedom do not look upon that freedom as a license to indulge in the evils at which the law was aimed. In particular there must be an avoidance of implied agreements or understanding as to prices and production such as characterized the so-called 'Gary dinners.' The result of these dinners is succinctly stated in the opinion of Judge Buffington in the steel case.

"The plea of uncertainty can no longer be taken advantage of by trade associations. These decisions have laid down a clear definition of their rights, their privileges and their limitations.

"Properly read these decisions emphasize also that the issue of information to effectuate contracts, agreements or understandings, or any concerted action through combinations which has the necessary tendency to destroy competition through price fixing, restriction of production or other similar results, is unlawful.

"The course has now been charted. Deviations from the course must meet with the natural consequences following upon conscious violation of the law."

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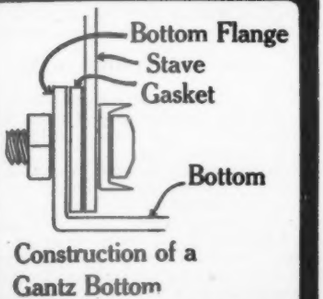

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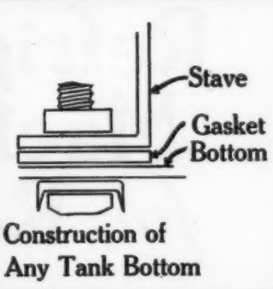

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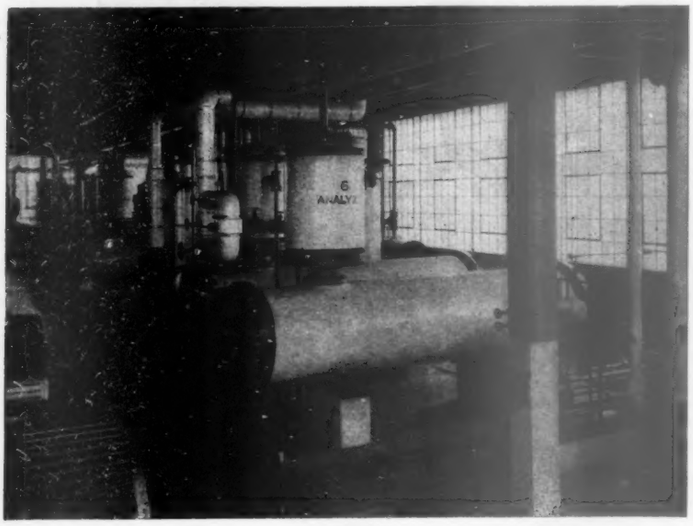

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ECONOMIC LAW BREAKING CAUSE OF PETROLEUM INDUSTRY'S TROUBLES

By Joseph E. Pogue*

For the fourth consecutive year, not counting 1921 when the cause was world-wide deflation, the petroleum refining industry finds its price structure in collapse at the peak of the consuming season.

In the first place, the industry is over-equipped with refining facilities. In the second place, the presence of huge stocks of crude oil in storage makes it possible to overproduce refined products at any time the industry so elects, independently of the current production of crude oil. In the third place, the industry has developed an ingenious method of manufacturing gasoline from gas and fuel oil at a cost which permits the synthetic product to undersell straight-run gasoline whenever crude oil prices are even moderately high. This process, still in its early stages as to efficiency and scope, is also enlarging the economic size of the crude oil in storage. Accordingly, the petroleum refining industry is surrounded by an array of physical conditions that make it easy to understand how overproduction as a recurrent annual incident in late years has been possible.

This Year's Lesson

Take 1925 as an example. With fresh supplies of refinable crude for the first time in several years not excessive, oil prices have nevertheless suffered one of the sharpest declines in the history of the industry. Why? Merely because the refineries of the country, oblivious to consequences, expanded their operations until they were running to stills upwards of 200,000 bbls. of crude oil daily in excess of market requirements. Naturally the surplus output could not be absorbed; stocks accumulated; manufacturers became anxious to move their output, consumers reluctant to buy. Price declines were inevitable. For what other factor is competent to bring about a curtailment of activities in an industry where price alone is listened to? Maturer industries are often regulated by economic principles; not so oil. An unkind critic might accuse the petroleum industry of deliberately attempting to contravene the laws of economics, with optimistic expectations of success. However else, other than on the score of ignorance of what it was doing, a graver charge, can one explain overrefining to the gross extent of 10 per cent? Think of the steel industry, for example, expanding its output 30 per cent in one year and expecting to get away with it, as the oil industry did with the output of gasoline?

But the mere physical ability to oversupply your markets, growing out of excessive equipment, large stocks of raw material, and advancing technology, is not alone sufficient to explain habitual overproduction. The physical ability to overproduce need not necessarily be followed by overproduction. The human factor comes in; there must be human motives present, which misdirected lead to overproduction. If you will permit a personal opinion, these activities center about a more or less ill-defined idea that a crude oil shortage is always just ahead—an elusive idea that is very difficult either to substantiate or to refute, and yet an idea that fires the industry with optimism when prices rise and merely lies dormant when prices fall. Whatever the ultimate merits of this idea may be, it has thus far proved a poor operating guide, for it has made refiners reckless in expansion and conservative in curtailment, whereas the reverse is collectively much the more profitable. Of course, overspreading this primary idea and in many cases hiding it, are the more practicable considerations that induce the individual refiner to seek to maintain capacity operations and to attempt to liquidate on good markets the stocks left over from the previous cycle of over-optimism.

Thus, as a result of its physical ability and in response to an idea, which however probable as an eventuality, has certainly thus far proved inexpedient to maintain, the petroleum refining industry (or, indeed, the entire petroleum industry, for that matter) has come to base its collective operations more upon hope and optimism, than upon cold, hard analysis of facts. In consequence, the industry has not once or twice, but time and time again, transgressed the cardinal economic laws that almost without exception in the history of industrialism have refused to be broken without exacting inexorable penalties for their violation.

Now, what is to be done about it all? Unfortunately, there is no panacea to offer. The prime objective of an industry is to balance demand with supply. Equilibrium of supply and demand is tantamount to stability. How can this equilibrium be attained and maintained? There are but two forces competent to create balance and stability. These are price and production control. Price will operate without individual effort, according to the well known law of supply and demand, whereby:

"1. When, at the price ruling, demand exceeds supply, the price tends to rise. Conversely when supply exceeds demand the price tends to fall.

"2. A rise in price tends, sooner or later, to decrease demand and to increase supply. Conversely a fall in price tends, sooner or later, to increase demand and to decrease supply.

"3. Price tends to the level at which demand is equal to supply."

Thus, price is a mechanism that creates an average condition of equilibrium over a long time, but price achieves this result by bringing about alternate periods of overproduction and curtailment, the familiar cycle of prosperity and depression. The objection to price as a governor is that price follows a condition rather than precedes it, is a curative, not a preventive. The problem before the petroleum industry is to prevent, or rather to minimize, the violent price fluctuations that have proved so disastrous in late years.

Solution Suggested

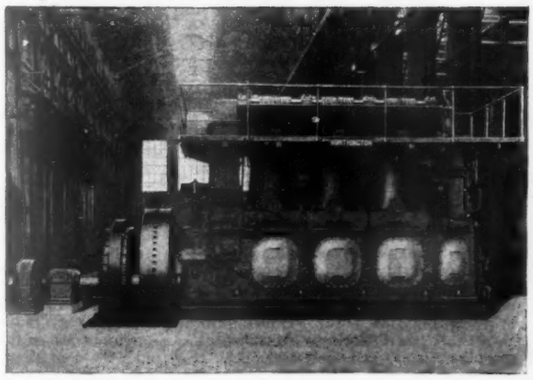
The solution of this problem requires that the industry shall not wait to get its cue from the action of price, for then it is too late, but that the industry shall recognize from adequate statistics competently interpreted the symptoms of overproduction, and then be ready to prevent the development of the disease by the only treatment that can be effective, controlled production. This is no easy result to achieve. No royal road leads to this destination. But, at least, the direction of progress is plain.

And, yet, one might hestitate to see the prime characteristic of the petroleum industry, its flair for the spectacular, supplemented by the even tenor of stability. Something, after all, may be said in favor of wild market fluctuations, carefree optimism and unbridled operations. These elements add an interest and zest to an industrialism which ordinarily tends to the drab and monotonous. It is dramatic for the petroleum refining industry to break its markets into semi-annual segments. It is dramatic to give the consumer the benefit of gasoline below cost several months in every year. It is not only dramatic, but philanthropic. But if the industry, perchance, should tire of tragedy and charity, it should mark the economic law and obey it.

*Before the National Petroleum Association, Atlantic City, September 18, 1925.

CATALOG SHOWS TONGS

A new catalog unit has just been produced by the Wilson & Willard Manufacturing Co., Los Angeles, Cal., featuring its various types of tongs. In addition to illustrating and describing the tongs, the parts are also illustrated. The tongs described include the new drop forged rotary tongs, the new casing tongs, new Royal Dutch tongs for special export service, 8-inch double extra heavy tongs and tubing tongs. All of these tongs are said to embody the two-step spring latch feature.



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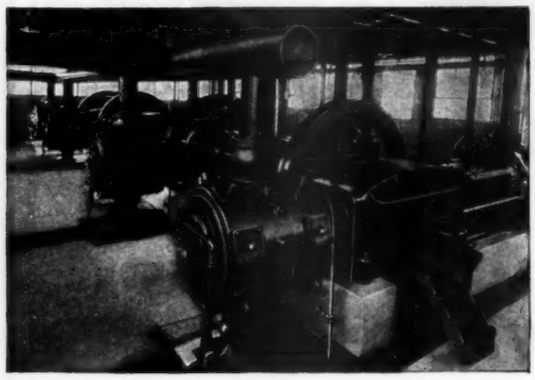

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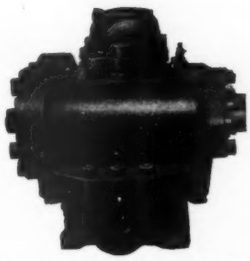

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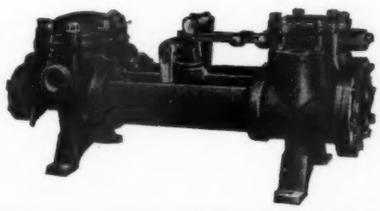

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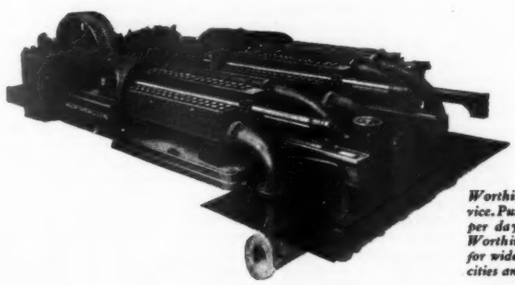

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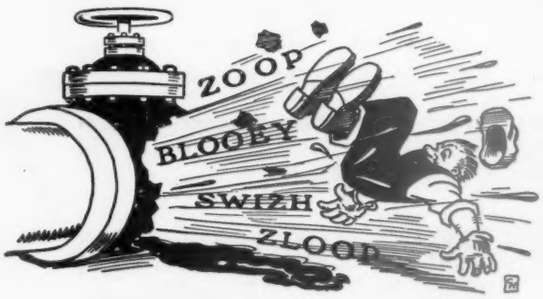


Another good valve gone wrong

WHEN a valve—or any other piece of vital equipment—goes blooey, it does small good to don deep mourning and offer up sad lamentations.

The trouble may have resulted from a number of different causes. But 99 to 100 the breakdown can be laid at the feet of a faulty casting.

The sensible thing to do is to take a firm stand right there and then. Be stern about the matter. Replace the broken part at once with Champion Drop Forgings. Then you have positive assurance of the sturdy, give-and-take ability of steel. You also make an investment in longer equipment life.

And while you're in the market again for equipment insist on drop forged parts—particularly Champion Drop Forgings—for trouble-free performance and longer equipment life.

THE CHAMPION MACHINE & FORGING CO.
CLEVELAND, OHIO

A forging is something more than a piece of hammered steel

CHAMPION DROP FORGINGS

OIL SITUATION AT END OF JULY MARKED BY INCREASE IN STOCKS

During July, instead of there being a substantial reduction in the amount of crude oil and its products above ground, there was an increase of about 2,000,000 bbls. over June total stocks, and June total stocks showed an increase of 4,000,000 bbls. over May, according to an article in the September bulletin of the Mid-Continent Oil & Gas Association.

Referring to the accompanying table, it will be noted, however, that during May the surplus of supply over demand averaged 341,785 bbls. a day—during June it averaged 144,036 bbls. a day—and during July it averaged 62,953 bbls. a day.

In analyzing the factors entering into supply and demand we find that during May, June and July we produced 68,000,000, over 66,000,000 and over 67,000,000 bbls. of crude oil respectively—that we imported 8,000000, 7,000,000 and almost 6,000,000 bbls. respectively. In other words our crude supply during these three months was 76,000,000, almost 74,000,000 and 73,000,000 bbls. respectively.

During these same three months the net result of the change in the stocks of crude oil, refined and partly refined products, as shown under "source of difference" in the accompanying table, showed increases of over 10,000,000 bbls., over 4,000,000 bbls. and almost 2,000,000 bbls. during the respective months.

Supply and Demand

Referring to the four items which make up this "source of difference" it is interesting to note that during May pipe line and tank farm stocks increased over 6,000,000 bbls., while stocks at refineries increased almost 4,000,000 bbls.—a total increase of over 10,000,000 bbls. Total demand was a little over 65,000,000 bbls. compared with a total supply of 76,000,000 bbls.

During June pipe line and tank farm stocks were drawn upon for 610,000 bbls., while refined and partly refined products at refineries increased 3,600,000 bbls. at the same time that crude oil at refineries increased almost 1,500,000 bbls. In other words—during June—the supply of crude oil, refined and partly refined products, at refineries, was over 5,000,000 bbls greater than the demand.

During July pipe line and tank farm stocks increased negligibly (471,000 bbls.), crude at refineries increased by about the same amount, while foreign crude not at refineries increased 26,000 bbls.

Increased During July

The outstanding fact, however, is that during July, stocks of refined and partly refined products at refineries increased slightly more than 1,000,000 bbls., whereas it would seem that there should have been a very substantial reduction.

Looking at the bottom of the three columns we find that at the end of May there were almost 41,000,000 bbls. of gasoline in storage, compared with almost 81,000,000 bbls. of all other refined and partly refined products—that at the end of June we still had over 40,000,000 bbls. of gasoline in storage, compared with 85,000,000 bbls. of all other products—and that at the end of July we had over 38,000,000 bbls. of gasoline and 88,000,000 bbls. of other products.

Overproduction of Gasoline

Turning to the table "United States Bureau of Mines Report on Refining Output" we note that during May we produced 922,000,000 gallons of gasoline and that the domestic consumption was nearly 842,000,000 gallons—that during June we produced 944,000,000 gallons against a domestic consumption of 868,000,000 gallons—and that during July we produced 966,000,000 gallons against a domestic consumption of 963,000,000 gallons.

In other words, during the three months in which the underproduction of summer months should make a reasonable adjustment with the overproduction of winter months, we forced overproduction of gasoline so high that even with a domestic consumption of nearly 1,000,000,000 gallons in July, we reduced our gasoline stocks only 2,000,000 bbls.

In the light of the foregoing figures it would seem that we are producing not only too much crude oil, but that we are producing too much gasoline at a season of the year when gasoline stocks should be substantially reduced.

At the end of July stocks of crude oil stood at nearly 422,000,000 bbls.—stocks of gasoline at over 38,000,000 bbls.—and stocks of fuel oil, east of California, at over 25,000,000 bbls.

Referring to the barometer on the last page of this Bulletin, it will be noted that the needle for July is on the wrong side of "equilibrium"—and that the industry would be more comfortable today

SUPPLY OF AND DEMAND FOR PETROLEUM PRODUCTS

	May	June	July
Supply—			
Domestic crude oil	68,082,000	66,675,000	67,318,000
Imports—All oil	8,000,736	7,222,333	5,847,969
Total supply	76,082,736	73,897,333	73,165,969
Demand—			
Domestic and export	65,487,407	69,576,239	71,214,428
Difference	10,595,329	4,321,094	1,951,541
Source of Difference—Increase in			
1. Pipe line and tank farm stocks	6,519,126	*610,000	471,000
2. Crude oil at refineries	*38,907	1,467,000	425,000
3. Foreign crude not at refineries	303,000	*136,000	26,000
4. Refined products at refineries	3,812,110	3,600,094	1,029,541
Total difference	10,595,329	4,321,094	1,951,541
On a Daily Basis—			
The supply was	2,454,282	2,463,244	2,360,192
The demand was	2,112,497	2,319,208	2,297,239
Surplus or shortage	341,785	144,036	62,953
Total Petroleum Stocks—			
(a) Pipe Line and Tank Farm—			
East of California	278,644,000	275,960,000	273,206,000
California Light	45,359,000	45,226,000	44,269,000
California Heavy (1)	62,770,000	64,977,000	69,159,000
(b) Crude at refineries, east of California	32,415,000	33,882,000	34,307,000
(c) Foreign crude not at refineries	1,026,000	890,000	916,000
(d) Refined products at refineries:			
Gasoline (bbls.)	40,879,089	40,362,292	38,352,138
All other products (2)	80,963,875	85,080,766	88,120,461
Total liquid stock	542,056,964	546,378,058	548,329,599

(1) Includes fuel oil. (2) Does not include California fuel oil.

Please Note—Decreases are shown by both * and black face type. Increases are in light face type.

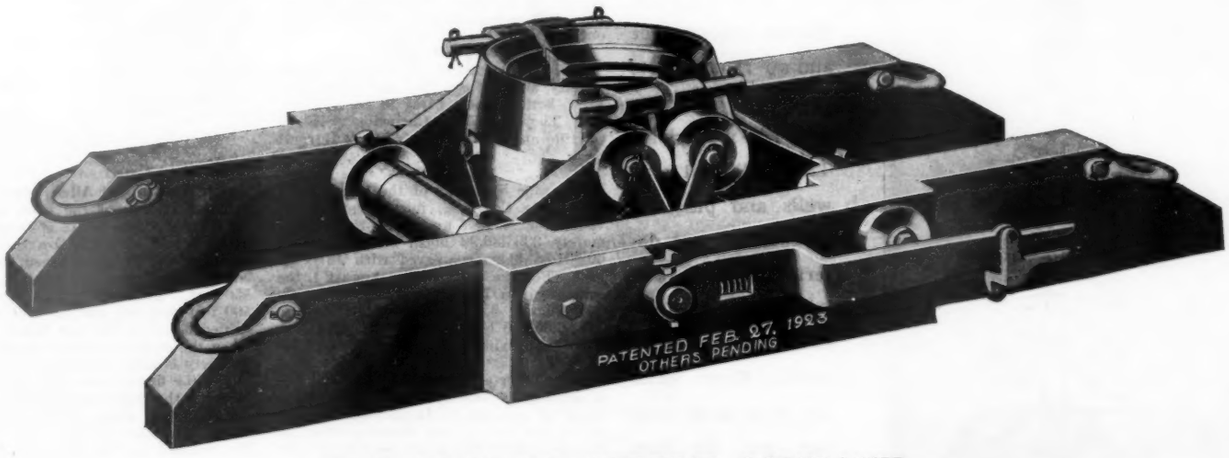
QUICK Action!

In this day of hazardous drilling in deeper wells, you need all of the most improved equipment. Bovaird Grip Spiders are modern, and designed to meet this need. The first expensive fishing job for dropped casing will show you the wisdom of using Bovaird Spiders in preference to old fashioned devices. Don't wait for an accident to teach you, however. Bovaird Spiders are easy to obtain. Ask at your supply store.

Lightning quick in operation, because they are wonderously simple in principle, Bovaird Grip Casing Spiders represent the operator's idea of what spiders should be.

They are hogs for work, too. By simply changing slips Bovaird Grip Casing Spiders will handle any size casing job, and will make running and pulling operations of ease, simplicity and safety.

You need Bovaird Grip Casing Spiders on every well to insure maximum safety, efficiency and economy in your drilling operations.



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FOR SALE BY ALL LEADING SUPPLY HOUSES

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TYPE "HD"
OIL WELL PUMP
GEAR UNIT

Our gears are B P Processed—heat treated so that we guarantee them to last at least four times as long as untreated gears, and this guarantee covers breakage as well as wear.

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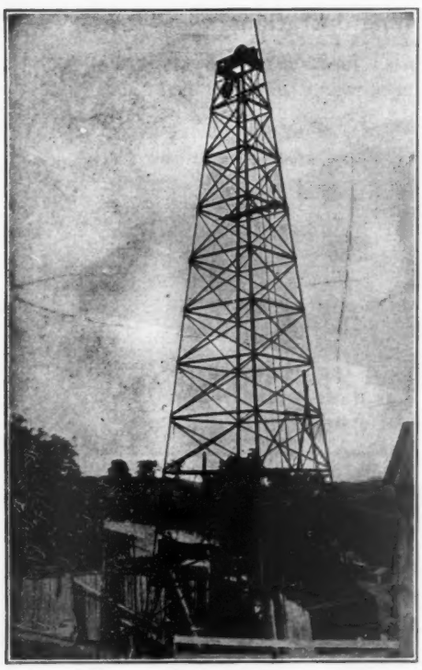
O'BRIEN STRUCTURAL STEEL DERRICKS



Eleven years in use and no repair parts necessary on any O'Brien derricks. They will drill your wells and pull the pipe. Will not deteriorate, your salvage will be 100% twenty-five years hence. Your wells are your bank, why not put the best structure over them you can get.

O'Brien Steel Construction Company
Washington, Penna.
Rig Equipment Company, Sand Springs, Okla.

if the needles for both June and July had shown demand to be in excess of supply.

The small dial shows total stocks slowly but surely increasing, with a total, at the end of July, of over 548,000,000 bbls.

BAROMETER OF THE PETROLEUM INDUSTRY

Based on the monthly reports of the Bureau of Mines of the U. S. Department of Commerce. The large dial indicates the average daily difference (on a monthly basis) between supply and demand—and whether the current supply is increasing or decreasing. Each space on the large dial represents 20,000 bbls. a day of difference betwen supply (production plus imports) and demand (domestic consumption plus exports) of both crude oil and finished products. During July the average daily supply was 62,953 bbls. greater than the average daily demand. The small dial indicates total stocks of crude oil and products made from it, on the last day of the month. For the exact amounts of different items which make up the totals for recent months see "Total Liquid Stocks" in the table "Supply of and Demand for Petroleum Products." Each space on the small dial represents 5,000,000 bbls. of total stocks. On July 31, 1925, total stocks were 548,329,599 bbls.

KENTUCKY-TENNESSEE

(Continued from Page 54)

Drilling is extremely hazardous since the Corniferous lime in this vicinity varies greatly in porosity. Sometimes it is as fine as flour and at other times it comes out of the well in hard lumps.

Wayne County

The Beaver Sand Field of Wayne County showed two dry holes the past week, both of them being in District No. 13. They are Rex Carpenter's No. 1 Castillo and D. C. Adkin's No. 2 Burnett heirs.

August Runs

The pipe line runs of the Cumberland Pipe Line Co., Inc., in the eastern division for August amounted to approximately 339,530.92 bbls., an increase of 60,501.88 bbls., compared with July figures. For the week ending August 1, the company ran 70,282.22 bbls.; week ending August 8, 68,064.65 bbls.; August 15, 66,658.55 bbls.; August 22, 70,147.18 bbls. (approximate); August 29, 64,378,-32 bbls.

It is reported that the Wood Oil Co. is drilling its second venture on its large block of acreage in Rockcastle County. No. 1 test had a good showing of oil at less than 1,000 feet where 30 feet of sand was encountered, encouraging the company to drill several additional tests.

The Standard Oil Co. of Kentucky has resumed drilling in its test on the Foreman tract on Stinking Creek in Knox County after numerous delays. At 1,000 feet a showing of gas was found which ignited and caused a small blaze with further delay in prospect.

Western Kentucky

Runs and shipments from the various counties in the western division of Kentucky for the month of August amounted to 120,609.00 bbls., a decrease of 12,318.-94 bbls., when compared with July figures. The largest decreases occurred in Warren, Allen, Cumberland and Monroe counties while the Owensboro district hit the peak with a total run of 20,748.19 bbls. The runs were distributed as follows:

County—	Runs	Increase	Decrease
Warren	37,141.71	.....	6,075.26
Allen	28,276.98	.....	3,046.65
Barren	24,996.29	.....	724.45
Owensboro District	20,748.19	1,247.38	.....
Cumberland-			
Monroe	6,178.97	.....	3,003.22
Hopkins	1,492.25	.....	5.40
Simpson	1,106.60	378.39	.....
Clinton	512.93	.....	1,160.83
Logan	155.08	71.10	.....
Aug. runs	120,609.00	1,696.87	14,015.81
July runs	132,927.94		
Difference	12,318.94		

Warren and Allen Counties

The best well of the week is credited to Warren County. It is Onsel & Harnahan's No. 4 on the Ora S. Davenport farm, west of Bowling Green, in the Davenport Pool, good for 48 bbls. flush at 550 feet. The first shallow pay at about 400 feet was dry and the hole was being drilled down to the pay below the shale when the stray sand was picked up. This property is now producing oil from three pays—the first at 400 feet, second at 550 feet and the third in the deep sand below the shale at about 1,000 feet. In the same immediate vicinity the Wood Oil Co. finished its No. 22 C. G. Davenport for a 2-bbl. stripper at 1,042 feet, approximately 85 feet below the shale.

In the vicinity of Greencastle in the northeast section of the county on Barren River, the Evans Oil Corp.'s No. 3 McGinnis is a duster at 650 feet.

H. V. Taylor's No. 16 Smith, in the Richpond Pool, south of Bowling Green, made 8 bbls. on jack at 480 feet.

In the shallow Allen County, the Keyes Oil Corp.'s No. 9 Beam, in the Gainesville Pool, pumped 3 bbls. at 345 feet. On the W. F. Johnson lease, McMullen & Reagle completed a 2-bbl. starter in their No. 13 at 342 feet.

In the Lyle Pool, southwest of Scottsville, Work & Sons' No. 12 Albert Lyle

NIGHT SHIFT IS BUILDING PITS

Crusader Sets Men to Work Under Powerful Lights to Dig More Storage

Turning night into day, while rapidly building dirt oil pits is the latest feat of the Crusader Oil and Refining company, aided by 100-pound, 500-watt lights supplied by Alex E. Johnson, Pyl-O-Lite company of Chicago.

Since opening its new storage and [illegible] of town, the Crusader [illegible] has not been swamped with oil because it has not had time to build pits to accommodate it.

The new Crusader company is building an extensive storage, curing, and pumping plant. At present it has five 1,000-barrel tanks, two 10,000 tanks, and one 5,000 already constructed and full of oil. It is rapidly completing a curing pit of large dimensions and has installed a battery of five steam pumps in the boiler rooms.

A row of new-apinted houses is being completed and a high wire fence with an archway bearing the company's name is being erected in front of them.

Crusader now has one overflowing pit of 175,000 gallons of oil and is preparing to use the new pits under construction, at once. The plant and will place Crusader on a direct connection with the Smack-over highway.

"Swamped with oil"

until Pyle-O-Lytes made night digging possible...

But Pyle-O-Lytes are not just an emergency measure. It is in ordinary operation that they do the most good, doubling up on time, speeding production.

Use them with the simple, sturdy Pyle-National Steam Turbo-Generator, then you'll have an outfit that'll stand the gaff.

There's a man near you who's trained in floodlighting, knows the relation of floodlighting to faster production. Want to talk to him? Say the word!

A product of The Pyle-National Company, for twenty-eight years the world's largest manufacturer of locomotive headlight equipment.

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A Compact Ratchet Tool to Thread ½" to 1¼"

Here at last is the small threading tool you have been waiting for. A light, compact ratchet tool that reaches the pipe anywhere and produces smooth perfectly tapered threads easily.
Instant change of dies, utilizing "TOLEDO" easy-cutting dies that may be removed and reground when dull or replaced at small expense.
The "TOLEDO" No. 11 is the ideal tool for threading ⅛ to 1¼-inch pipe.
Ask your jobber for the low net price, or drop us a postcard.

THE TOLEDO PIPE THREADING MACHINE CO.
Toledo, Ohio

The
Ludlow Valve
1925
Catalog
is now ready for distribution and will be mailed free on request.

The Ludlow Valve Mfg. Co.
(Established 1866)
Factory: Troy, N. Y.
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was finished dry at 300 feet. No. 3 S. and K. Thatton, drilled by Deardoff and others, was dry and abandoned at 485 feet.

Barren County

The recent completion of the Kopel Oil Co. on the H. Myers tract, which served to open a new producing area 2 miles west of Glasgow in Barren County, pumped 20 bbls. initial at 498 feet. It has now settled to 8 bbls. No. 2 is drilling.

A wildcat venture drilled by the Wood Oil Co. 3 miles north of Glasgow near the Stone Quarry failed to show production at 600 feet, about 200 feet below the shale and was abandoned. This lease lies between the Duff gas well and the Hall Baker Pool and had it been a producer would have opened quite a bit of new territory.

In the Emery-Moore Pool, west of Glasgow, Fred Moore's Nos. 5 and 6 Bruton were finished good for 8 and 5 bbls. at 540 and 559 feet, respectively. Star Oil Co.'s No. 37 Ritchie made 7 bbls. at 185 feet under the shale; No. 6 Free, of the same concern, is estimated at 5 bbls.

L. J. Emery, Jr., & Sons brought in their No. 2 Preston in the Gorby Pool the first part of the week for a 2-bbl. pumper at 165 feet under the shale. No. 1 on this same place started off at 72 bbls. from the same pay, extending the Gorby Pool 1,000 feet west. No. 3 is being started.

At Coral Hill, 5 miles north of Glasgow, Smith & Son have an 8-bbl. pumper in their No. 8 Nichols at 40 feet under the shale. The Esslinger Oil Co.'s No. 7 Jones, adjoining the Nichols showed for 2 bbls. at 40 feet below the shale.

Wildcat Has Gas Showing

The wildcat test being drilled by Haislet & Wood on the Morgan farm a little over one-fourth of a mile south of the Adair County line in Cumberland County blew in several days ago making over 1,000,000 feet of gas from the Richmond sand at 145 feet below the Chattanooga black shale. The owners of the well expect to drill on down to the Sunnybrook sand just as soon as the gas pressure in the well is under control. This test spudded in 30 feet below the shale and the Sunnybrook sand is expected at from about 220 to 232 feet.

C. D. McLennon of Shreveport, La., has made a location for a test in southern Adair County and is now making arrangements to move in a machine and start active development.

Cumberland County News

Three dry holes is the record made during the time in review in the Cumberland County Field. At Sulphur Creek, the Kanawha Oil Co. got a dry one in its No. 3 L. J. Coop at 1,071 feet. Freeman & McCormick's No. 5 T. L. Bow, at Bear Creek, is dry in the second Sunnybrook sand. The sand in this hole pinched out to but 2 feet compared to 32 feet in other wells on the same property. The well will, however, be carried on down to the lower horizons at a later date. No. 6 is spudding in. Just over the Cumberland line in Clinton County, the Vedder Oil Co.'s No. 5 J. T. Tompkins heirs has been drilled for a dry hole through the second Sunnybrook at 525 feet. The rig is being moved to No. 2 on the same farm which will be carried on down to the second Sunnybrook. No. 5 will be left with the casing in the hole as it will be drilled to the Pencil cave sand at a later date.

The Vedder Co. has drilled seven wells on its Fannie Creek leases which will be carried through the cave as soon as the upper sands have been depleted. Four wells have been drilled to the cave for the purpose of determining the structure elevations and to locate the right spot for a deep test. It is believed by geologists that there is a cave structure of large dimensions extending from the Sulphur Creek development across Chestnut Ridge onto Fannis Creek and the Vedder Co. hopes to be the discoverer of the pool, if such exists.

Owensboro Field

White & Nicklin were credited with the best completions in the Owensboro district last week when their No. 5 O. T. Burdette came in at 750 feet for 15 bbls. On the Abe Howe farm the Pennsylvania-Indiana Oil Syndicate's No. 7 Howe, 400 feet north of No. 6, is a 5-bbl. pumper from the Barlow sand at 750 feet. A semi-wildcat drilled by C. E. Daugherty on the Ira Crowe lease, west of the J. R. Ellis, which is producing from the Jett sand, was dry in the Jett and Barlow sands. The hole was drilled to 754 feet.

Drilling Operations

The Wood Oil Co.'s No. 1 C. D. Swizer is drilling at 310 feet; C. A. Leeper's No. 1 C. D. Veach, drilling at 205 feet; Andrus and others' No. 1 Rogers, spudding; Triangle Oil Co.'s No. 1 W. P. Howard, spudding; Miller and others' No. 1 Hidgon, drilling at 400 feet; same parties moved a rig to drill No. 1 Rene Brown; Pennsylvania Indiana Oil Co.'s No. 8 Abe Howe, drilling at 230 feet; No 9 John Swope, drilling at 350 feet; C. E. Daugherty's No. 7 L. Crowe, drilling at 200 feet; C. A. Leeper's No. 4 H. D. Brown, drilling at 450 feet; No. 3 Susan Coyler, drilling at 400 feet; White Plains Oil & Gas Co.'s No. 2 McBrayer, drilling at 250 feet; I. N. Harless' No. 2 Lafe Payne, spudding 800 feet southwest of No. 1.

GULF COAST PRODUCTION DECREASED IN AUGUST

HOUSTON, Tex., Sept. 19.—The estimated gross production in the Gulf Coast pools totaled 3,087,339 bbls. for the month of August, or a decrease of 239,506 bbls. compared with July. The South Louisiana pools are credited with 320,767 bbls. of the total.

Compared with July, the Hull Pool decreased 25,594 bbls.; the Goose Creek Pool decreased 25,203 bbls.; Orange was off 11,191 bbls.; Vinton declined 22,103 bbls., and South Liberty 125,085 bbls. The West Columbia Pool maintained about the same average as in July.

The following table gives the number of producing wells in each district, estimated daily average production and the gross for the month:

Gulf Coast

District—	No. Wells.	Daily Average.	Gross Prodn.
Batson	479	1,584	59,104
Blue Ridge	20	737	22,847
Barber Hill	3	95	2,945
Big Creek	15	1,057	32,767
Dayton	4	47	1,457
Damon Mound	51	1,150	35,650
Edgerly (La.)	32	505	15,655
Goose Creek	251	9,721	301,351
Humble	296	4,342	134,602
Hull	252	18,917	586,427
High Island	6	535	16,585
Jennings (La)	53	802	24,862
Lockport (La)	3	125	3,875
Markham	15	75	2,325
Orange	176	15,929	493,787
Pierce Junction	9	412	12,772
Spindletop	161	1,096	33,976
Saratoga	416	1,474	45,694
Sour Lake	430	4,279	132,649
South Liberty	112	15,949	494,419
Vinton (La.)	123	8,835	273,885
Welsh-Anse La Bute	4	80	2,480
West Columbia	115	11,415	353,865
Miscellaneous	9	110	3,410
Totals for August	3,035	99,271	3,087,339

The estimated gross production in the Southwest fields for August totaled 1,456,752 bbls., a decline of 21,204 bbls. from the July estimate.

The Luling Field showed an increase of 8,966 bbls. and Lockhart decreased 6,789 bbls. The Laredo and Jim Hogg County pools both decreased from the July estimates.

The estimate for each field is as follows:

Southwest Fields

District	No. Wells.	Daily Average.	Gross Prodn.
Luling	403	23,276	721,656
Laredo	*399	4,347	134,857
Somerset	232	2,592	80,352
Callihan	32	301	9,331
Rockdale-Minerva	214	792	24,552
Jim Hogg County	59	3,744	116,064
Lockhart	219	11,940	370,140
Totals for August	1,558	46,992	1,456,752

*52 gas wells in addition to oil wells.

CONGO PIPE LINE

According to messages from Brussels, a 5,000-ton tank steamer has arrived at Ango-Ango. It is expected that within a month, the pipe line will be able to deliver gas oil at Kinshasa. These operations are those of the Petrole du Congo, in which the "Petrofina" owns an interest.

An "Ace Full" that can't lose

With a Titusville Rotary Outfit on the job—you can't lose—ruggedly and powerfully built—these Titusville Units played a most important part in the speed records recently established in the Wortham Field when 2,950 feet of hole was made in 108 hours and a similar record in the Luling Field in 5 days, 19 hours.

Ask any Continental man for particulars on

Titusville Oil Country Equipment

The TITUSVILLE IRON WORKS Co.

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EASE, SAFETY and COMFORT
with an
M-S-A STANDARD
HOSE MASK

Supplies a continuous stream of fresh air to workers in tank cars, oil tanks or in any confined gaseous space.

Fresh, cool air blowing over the face of the worker enables him to work for long periods in absolute safety.

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By Frank A. Epps
*Manager Fire Protection Department, Tide Water Oil Co.**

The activity of the Department of Insurance and Welfare has significance which stamps the National Petroleum Association as a leader in a great movement.

Fire prevention is a subject of national concern. Our national fire bill now approximates $550,000,000 annually —$1,044 a minute, more than enough to pay for the total annual cost of operation and maintenance of the United Staes Postal Service. It represents a tax per individual of $5 per year. In addition we are paying for the overhead operating expenses of insurance companies and cost of maintaining municipal fire departments. Those additional items swell the total amount each year to well over a billion dollars. If it were possible to arrange a hypothetical means whereby each man, woman, and child in this country would be compelled to pay his pro rata proportion of approximately $10 annually, I feel sure that the real magnitude and far-reaching effect of this fire damage would be more universally recognized. Such a direct tax—such a direct penalty—would make us all stop and think. However, such a plan is not practicable. But do not think for a minute that each individual—each one of you—is not paying his fire tax just the same.

You contribute your proportion without realizing it. Every article of clothing, every bit of food, every bit of furniture, everything that you buy carries with it as part of the purchase price its proportional part of this fire cost. The producer of raw goods places fire insurance on his stocks and property. That insurance becomes a part of his cost, but it is paid for by the purchaser of the raw goods, the manufacturer. Then the manufacturer insures his stocks and property and the tax is passed on to the wholesaler. The wholesaler and retailer, in turn follow suit, and you and others citizens pay your assessments to meet this billion dollar a year loss. Get that picture of the economics of this thing.

Striking Contrast

There is another aspect that I want to point out to you. We were horrified at the Shenandoah disaster two weeks ago; thirteen men were killed. Tragic accounts of it appeared in every newspaper in the country. On that same morning, where did we find any mention in the papers of this far greater catastrophe—fire—which took the lives of 41 the same day. And this is a daily occurrence. Fifteen thousand human beings are burned to death a year. Half as many as we had killed in action in the war. How can it be possible for so many of us to look with indifference upon the subject of fire prevention. I don't know what it is about this subject that makes so many people look upon it with indifference. There must be something in the makeup of the average American at the bottom of it. I do not know what to call it—heedlessness, thoughtlessness, carelessness, indifference. And it is an American trait. The per capita fire loss in this country is eleven times greater than the average of all the countries of Europe put together; our average is over four times that of any other single country. Practically all of our great fires or conflagrations have been caused directly by our habits of indifference, carelessness and thoughtlessness. The memorable Chicago fire started when a cow kicked over a lighted lantern in a barn. Eighty blocks of the city of Baltimore burned when a boy dropped a lighted cigarette through an iron grating leading to a basement. An electric iron with the current left on was the cause of a fire which consumed the business section of Augusta, Ga. A ball of yarn bouncing into a fireplace and then kicked out of doors burned most of Nashville, Tenn. Sparks from a bonfire kindled by some mischievous boys completely destroyed Paris, Tex. The conflagration at Chelsea, Mass., started in some oily rags, evidently from spontaneous combustion. You all recall the enormous losses sustained at Salem and Worcester, Mass. They are credited respectively to a carelessly tossed match and the upsetting of an oil lamp. The carelessness of a mechanic using a gasoline torch when repairing a roof almost swept Jacksonville, Fla., out of existence 20 years ago. And there are others. Carelessness, indifference, criminal negligence are at the bottom of every one of them.

Individual Responsibility

There is something in our make-up our environment, our independence of thought which perhaps makes us too sure of ourselves. We are prone to think of this subject of fire prevention as one which concerns the nation and not ourselves individually. We think of it as being the other fellow's problem and not ours personally. Even now, how many of you in this audience are registering the opinion that while this may be "'good stuff,' it applies to the other fellow and not to me." How many of you will go home after this convention and think anything about what you can do to help save some of these lives and property. You can do a great deal, if you will. Anyone can inform himself of the principal causes of fire and how it can be prevented. Anyone of you can be an influence in his own community and in his own circle of friends.

When Mr. Wotowich told you that 34 out of 58 companies in the National Petroleum Association have appointed fire marshals to cooperate with this association in this national program, you received a measure of the extent that the seriousness of preventing fire waste has so far impressed our membership. Thirty-four out of fifty-eight.

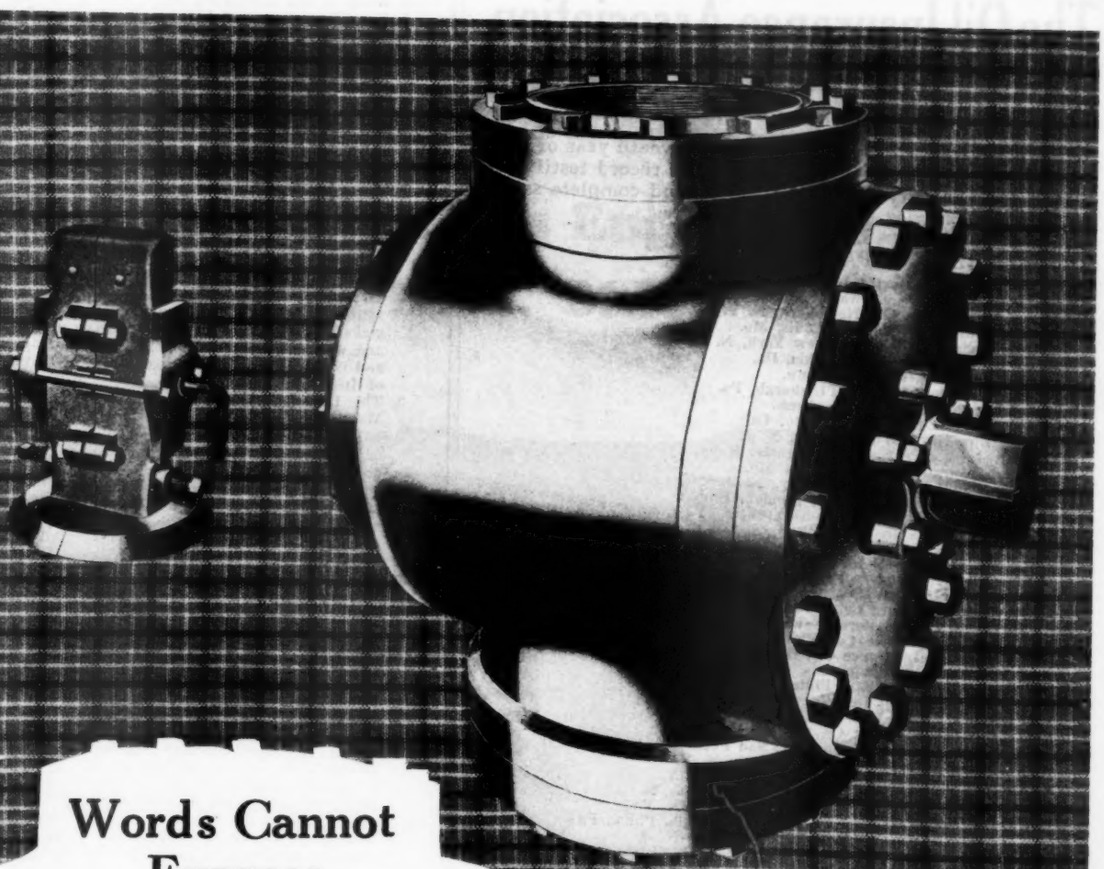
In one way, this ratio is very encouraging. It indicates there is a considerable activity on the part of our members. Nevertheless, there are far too many companies not keenly alive to this situation. Purely aside from public-spirited and humanitarian considerations, organized fire carefulness is a money making proposition in conserving evaporation losses, lessening insurance premiums, reducing fire and life losses and consequent interruptions to business. There is not a single legative aspect about fire prevention which should cause any company to hesitate one second to take an active interest in it.

No, I do not believe that there is a man in this room who way down in the bottom of his heart does not agree with me 100 per cent. Then why do some of you sit back and do nothing? Get behind this. It is a worthy enterprise. Give your support—and your company's support—to this national necessity.

It is of primary importance that we secure on the part of the member companies of this association a more complete participation of this fire prevention drive. I have indicated a number of reasons why every individual and every company connected with this association should actively cooperate in this movement, which will not be successful unless we have working a workable plan. We cannot feel that our plan is really and truly working unless we have all of our companies participating.

The second purpose of this paper is to suggest means whereby our present plan may be made more workable. According to my analysis this fire prevention drive really becomes a three-party enterprise. The smooth and perfect functioning of this enterprise depends upon the individual performance of each of the three parties. Failure of any party to do his share will minimize or even nullify the work of the other two parties. Who constitute this triumvirate and what is

*Before National Petroleum Association, Atlantic City, September 16, 1925.



Words Cannot Express

the advantages to be derived from the use of our Control Casing Head, or the saving and conveniences of our Double Roller Oil Saver.

Experience has proven the value and the real necessity for this equipment.

Why experiment when your supply house can be depended upon to furnish you with them quickly. They are "Standard Equipment" the world over.

Standard Equipment
Control Casing Head

This is the new type.. ..with two sets of packing rubbers. The packing can be renewed quickly while drilling is in progress.
Double Roller Oil Saver

Standard Equipment the world over. Stocked by the leading oil field supply houses in every oil field.

THE OIL WELL IMPROVEMENTS CO.
Tulsa, Okla.

We will be glad to send descriptive circular covering either or both of these pieces of equipment upon request.

The Oil Insurance Association

Provides for

Real Fire Insurance for the Oil Industry

The Oil Insurance Association is in its seventh year of successful operation, with 100% performance record testifying to the dependability, thrift and speedy and complete satisfaction of its service.

OIL INSURANCE ASSOCIATION
MEMBER COMPANIES

Aetna Insurance Co., Hartford, Conn.
American Insurance Co., Newark, N. J.
American Alliance Ins. Co., New York, N. Y.
American Central Ins. Co., St. Louis, Mo.
American Eagle Fire Ins. Co., New York, N. Y.
Alliance Insurance Co., Philadelphia, Pa.
Automobile Ins. Co., Hartford, Conn.
Ben Franklin Underwriters, Pittsburgh, Pa.
Boston Insurance Co., Boston, Mass.
California Ins. Co., San Francisco, Cal.
Camden Fire Ins. Ass'n., Camden, N. J.
Central States Fire Ins. Co., Wichita, Kans.
Citizens Insurance Co., St. Louis, Mo.
Columbia Ins. Co. of Jersey City, N. J.
Commercial Union Assurance, London, Eng.
Commonwealth Ins. Co. of New York, N. Y.
Connecticut Fire Ins. Co., Hartford, Conn.
Continental Insurance Co., New York, N. Y.
Fidelity Phenix Fire Ins. Co., New York, N. Y.
Fire & Marine Underw't's, Hartford, Conn.
Firemens Fund Ins. Co., San Francisco, Cal.
Firemens Insurance Co., Newark, N. J.
Firemens Underwriters, Newark, N. J.
Franklin Insurance Co., Philadelphia, Pa.
Glens Falls Insurance Co., Glens Falls, N. Y.
Girard Fire & Marine Ins. Co., Phila., Pa.
Girard Underwriters, Philadelphia, Pa.
Great American Ins. Co., New York, N. Y.
Hanover Fire Ins. Co., New York, N. Y.
Hartford Fire Ins. Co., Hartford, Conn.
Home Fire & Mar. Ins. Co., San Francisco, Cal.
Home Insurance Co., New York, N. Y.
Hudson Insurance Co., New York, N. Y.
Imperial Assurance Co., New York, N. Y.
Insurance Co. of North America, Phila., Pa.
Insurance Co. of State of Pennsylvania, Phila., Pa.
Jersey Fire Underwriters, Newark, N. J
Liverpool & London & Globe Ins. Co., Liverpool, England
Mechanics Insurance Co., Philadelphia, Pa.
Mechanics Underwriters, Philadelphia, Pa.
Mercantile Insurance Co., New York, N. Y.
National Ben Franklin Fire Ins. Co., Pittsburgh, Pa.
National Fire Ins. Co., Hartford, Conn.
Natl. Security Fire Ins. Co., Omaha, Neb.
New Hampshire Fire Ins. Co., Manchester, N. H.
New York Underwriters Agency, New York, N. Y.
Niagara Fire Ins. Co., New York, N. Y.
North British & Mercantile Ins. Co., London, England
Norwich Union Fire Ins. Soc., Norwich, Eng.
Palatine Insurance Co., London, England
Patriotic Insurance Co. of America, New York, N. Y.
Pennsylvania Fire Ins. Co., Philadelphia, Pa.
Phila. Fire & Marine Ins. Co., Phila., Pa.
Phoenix Assurance Co., London, England
Phoenix Insurance Co., Hartford, Conn.
Providence Washington Ins. Co., Providence, R. I.
Queen Insurance Co., New York, N. Y.
Reliance Insurance Co., Philadelphia, Pa.
Rochester Dept. Gt. American, New York, N. Y.
Royal Exch. Assurance Co., London, Eng.
Royal Ins. Co., Ltd., of Liverpool, Eng.
Scottish Union & Nat. Ins. Co., Edinburg, Scotland
Security Ins. Co., New Haven, Conn.
Springfield Fire & Marine Ins. Co., Springfield, Mass.
St. Paul Fire & Marine Ins. Co., St. Paul, Minn.
Sun Insurance Office, London, England
Svea Fire & Life Ins. Co., Gothenburg, Sweden
Union Assurance Society, London, England
Union Ins. Soc. of Canton, Hong Kong, China
World Fire & Marine Ins. Co., Hartford, Conn.

Complete details of the Oil Insurance Association may be obtained from your insurance agent or broker.

Among the purposes for which the Oil Insurance Association were organized are:

To enable oil operators to secure sufficient dependable insurance to adequately protect their interests;
To furnish property holders and those controlling oil business expert engineering and inspection service, so methods of insuring this class may be standardized, and efficient fire protective devices installed and properly maintained, thereby stabilizing the business to the point which will enable insurance companies generally to accept the class at fair cost and under equitable policy rates;
To make available the most business-like insurance arrangement for all oil companies.

OIL INSURANCE ASSOCIATION
H. M. Carmichael, Manager
209 W. Jackson Blvd. Chicago, Ill.

expected of each? First of all, the three parties who are going to put fire prevention across in this association are:

1. Your Department of Insurance and Welfare.
2. An active executive officer in each member company.
3. A fire marshal in each plant.

The province of the Department of Insurance and Welfare seems to be as follows:

1. To convince you as executives of these companies that this is a proposition deserving of your complete support, as a national movement in conservation of life and property, as a worthy association enterprise and as straight, hard-headed, good business for yourselves.
2. To have you appoint for each of your properties a man who will make it his business to prevent fires and who will work actively for you and cooperate with the Department of Insurance and Welfare.
3. The Department of Insurance and Welfare will supply you gratis with bulletins, booklets and various kinds of propaganda suggesting things to do and how to do them, suggesting ways and means of accomplishing maximum results with minimum expenditures.

Beyond that, the Department of Insurance and Welfare feels that there is little more than it can do. It is up to you and your fire marshals to do the rest.

Your part as a company executive consists in the following:

1. In making up your mind whether or not your company should be actively in back of this kind of a proposition.
2. If you decide that your company is or should be concerned, you should secure (if your company has not already done so) the appointment of a properly qualified fire marshal and make fire prevention in your plant part of this man's job.
3. You should keep in touch with what this fire marshal does; keep him "on his toes" through your personal interest in what he is doing.
4. Without executive interest and inspiration in back of this kind of a proposition it won't "get anywhere."

Fire Marshal's Personality

Finally, with regard to the fire marshal. He is the one who must put this proposition across in this own plant. What he accomplishes is going to be measured largely by how he "sells" himself and his proposition, not only to the men at the plant, but also to you. Perhaps after all is said and done, the fire marshal is the "key man" in this whole campaign. If you have not already appointed a man, be careful in selecting him. If the man you have already appointed does not measure up, give the job to a man who does. His personal qualifications are so important I wish to lay particular emphasis on them. It is obvious the fire marshal should be an intelligent plant man, having at least considerable mechanical ability. He should be a young man preferably, because you cannot but realize how hard it is to teach an "old timer" new tricks. He should have a likeable personality and should be respected by the men, otherwise the propaganda he spreads will not be effective. Do not forget this fire marshal will have to convince you that his ideas with regard to fire protection are right, and accordingly, he must be a man in whose judgment you have considerable confidence.

Fire prevention must become a 365-day-a-year proposition in every nook and corner of your plants. Your men by degrees must all become imbued with the idea of fire-carefulness. Thus, fire prevention in the last analysis really becomes an educational proposition, and the fire marshal's place in this picture is somewhat as follows:

1. Probably his most important duty is to inspire fire-carefulness on the part of your employes, and this requires a well laid out program, tactful approach and persistent effort.
2. Once a month your fire marshal should make a complete inspection of the property of which he is in charge. The Department of Insurance and Welfare has provided forms for this purpose, indicating a number of things to be investigated. However, any keen and wide awake fire marshal will discover a multitude of things which lack of space prevents their inclusions on any routine report form.
3. In the course of his inspections the fire marshal will uncover various situations which should be corrected. He should be empowered with authority to issue orders to have all small items promptly attended to and his recommendations regarding other matters should be presented by him directly to an executive officer and followed through to a final decision.
4. He should see that fire brigades are properly organized and drilled; that the men in the various departments of the plant are fully instructed as to what to do in case of fire, especially with respect to salvage and to the protection of their own departments from nearby fires.
5. He should be on the alert to detect unsafe practices and by diplomatic approaches secure the correction of such practices.
6. The fire marshal should maintain a record of all fires that occur in the plant. He should carefully investigate each of these occurrences and determine what should be done to prevent recurrence—and then see to it that such things are done.
7. His work involves the accumulation and distribution of all fire preventative propaganda.
8. Finally, it is the fire marshal's duty to acquaint himself fully with the subject of fire protection through current literature, books and contact with other men who are doing the same work.

Those are the duties of a fire marshal. You can readily appreciate why a man of high calibre is necessary for that job. You can see why I call him the "key man."

To my mind, a definite organization of these men is essential if we plan to keep this ball a-rolling. These men should come to know each other intimately. Much can be accomplished by the exchange of information; a great deal of information can be obtained by listening to the other fellow's experiences. May I suggest that arrangements be made for semi-annual meetings of these fire marshals, such meetings to be held at central locations and usually lasting for a two-day period. A chairman and secretary should be selected, programs should be arranged and include papers from the men themselves on their personal experiences, talks by men who are professionally active in the field of fire protection, and round-table discussions on matters of general interest.

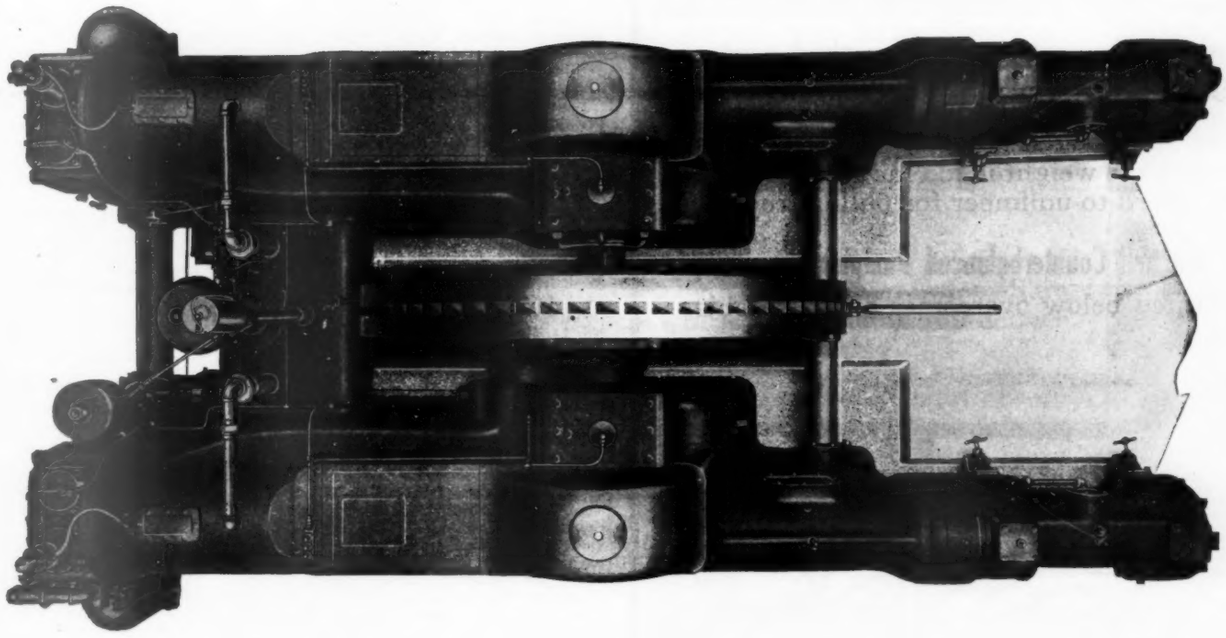
Education of our key-man, the fire marshal, is a very essential matter. He must establish contacts with these other men who are doing the same work. There is no better way of promoting interest, enthusiasm, and of providing mutual instruction than through a separate meeting of these men themselves.

I have not talked much about the selfish aspects of fire prevention. I have not enlarged on how your companies each can save many dollars by getting in back of this effort actively. Many of you have already commenced organized fire prevention. Fine. Now is the time to check up. Ask yourself to what extent your company's efforts have been perfunctory. Have you done what you should personally to help put this proposition across in your own company?

The opportunities to save money that organized fire prevention will present are numerous—far more so than most of you can possibly realize. But transcending those opportunities is the opportunity of saving a life—the opportunity for you to help lower that terrible record of loss of life in this country. Fire is the greatest life hazard in our business—the oil business. For God's sake, make your plants safe.

WATTS-MILLER

The Miller Improved Gas Engine Company
Springfield, Ohio



Choosing the Right Equipment

Engineers and producers who concern themselves chiefly with the design and construction of Gas Engine Driven Gas Compressors,

The importance of strength to stand up under 24-hour service, is their principal anxiety.

The Main Frame of the Watts-Miller Gas Engine Driven Gas Compressor is the embodiment of strength.

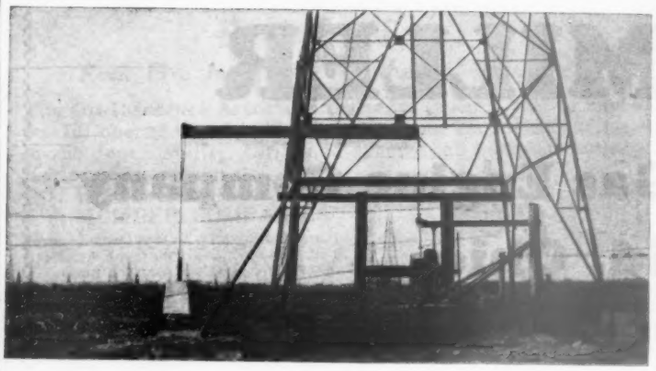
The strengthening ribs under main bearing are so arranged that the severest shocks imposed have no effect.

The Main Frame being cast in one piece, there will be no tendency for any loose joints.

The dependence of all the moving parts coming in perfect alignment. As the main frame is machined in a special designed boring mill, the frame never moves from table until complete.

With these details perfectly established, and all the moving parts, such as Crank Shaft, Crank Pins working in perfect alignment with copious lubrication, constant service is assured.

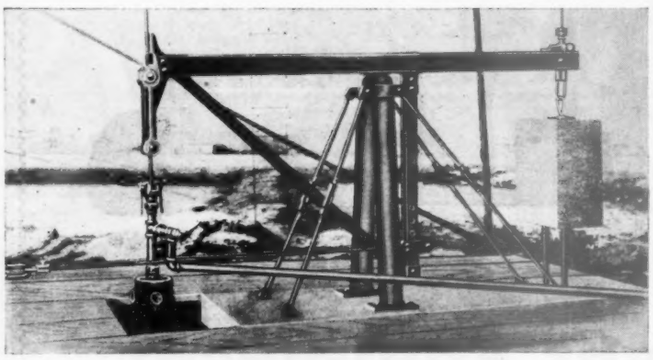
Deep Well Pumping Jacks



The above illustration is the method used of counterbalancing the Oklahoma Jack. It is the best of its kind used but it is expensive to install and dangerous to operate. It is too high and the weight is too far away from the load. Hard to unlimber for pulling rods.

Durnell Counterbalanced Pumping Beam

Illustrated below overcomes all these objections.



DURNELL COUNTERBALANCED PUMPING BEAM
(Patent Applied for)

Is a counterbalanced beam made of heavy steel channels with the polish rod on one end and the weight on the other, and is operated direct from the pull rods.

The Durnell Counterbalanced Pumping Beam is a great success. One company has over 150 of them and say that it is the only type of jack that has not broken its pull rod line.

The secret of deep well power pumping is Slow Motion, Long Stroke, Straight Lift, Heavy and Large Equipment.

The Durnell Beam has all these features and many others which we will tell you about later.

Manufactured by

UNION MACHINE COMPANY
BARTLESVILLE, OKLA.
Moran & Dwight, Demonstrators,
Tulsa, Okla

EASTERN FIELDS

(Continued from Page 52)

J. M. Simmons farm. In Grant district, Ira Williams and others have moved a drilling machine to a location on the West Virginia tract. In Grant district, Wetzel County, the Wiser Oil Co. has drilled through the cement at a depth of 2,060 feet on the John J. Mason farm. In Greene district, the Carnegie Natural Gas Co. has shut down for water at its test on the John Springer farm. In Magnolia district, Iams & Rosenbloom have drilled to a depth of 2,715 feet on the M. J. Parker farm and shut down for orders. In the same district, Rawe Brothers & Co. are due in the Big Injun sand on the W. L. Morgan farm. In Skin Creek district, Lewis County, the Carnegie Natural Gas Co. is drilling on the Rose Davis farm. In Freemans Creek district, F. G. Bish & Co. shut down for water on the John West farm. In Courthouse district, W. E. Turner and others are still fishing on the J. H. Livingston farm. In Ten-Mile district, Harrison County, D. E. Ritter and others have started to drill on the J. E. Williams farm.

Southeastern Ohio

In the southeast quarter of Section 16, Pike Township, Coshocton County, the Leonard Oil & Gas Co. has completed a second test on the Clyde Blair farm. The well produced 65 bbls. the first 24 hours after drilled through the Clinton sand and shot. In the same township, the same company has a 20-bbl. producer at a second test on the Nancy Norris farm. Spindler, Donnan & Co. have started to drill No. 4 on the Wolford farm. In Lot 3, Chatham Township, Medina County, E. R. Edson & Son completed No. 14 on the George W. Packard farm. It is not good for more than 2 bbls. a day.

In Clay Township, on the Clay Scott farm, the Arkansas Fuel Oil Co.'s No. 3 is a light pumper in the Berea grit. In Jackson Township, the same company's second test on the James Hardesty farm is good for 15 bbls. daily. No. 11 on the L. V. Dugan farm is due in the sand. In Licking Township, Licking County, W. W. & A. T. Wehrle are nearing the interesting stage at their Trenton Rock test on the Guy McDonald farm. In the same township, Moore & Adams are due in the Berea grit at No. 15 on the T. L. Stevens farm. In Madison Township, the Ohio Fuel Supply Co. is due in the same formation at a second test on the Orville Kiger farm. The A. H. Heisey Co. is drilling a second test on the G. D. Owens farm. In Hopewell Township, Muskingum County, Swartz and others are drilling a Berea grit test on the C. F. McInturf farm.

In Newport Township, Washington County, O. S. Reckard & Co.'s No. 9 on the F. F. Dana farm is a light pumper in the Keener sand. In the same township, F. E. Lawrence is drilling a test on the Abe Schultheis farm. In Warren Township, Buckley & Sons have a light show of oil and gas at a second test on the J. D. Wynn farm. In the same township, H. F. Lowe & Co. shut down for water at a second test on the W. A. Lowe farm. In Liberty Township, C. E. Smith & Co.'s second test on the C. E. Smith farm is dry in the Maxon sand. Heldman & Co.'s No. 3 on the T. E. Williams farm is dry in the Keener sand.

Pure Oil Gets Fair Well

In Section 23, Hopewell Township, Licking County, the Pure Oil Co. has completed and shot in the Clinton sand a test on the Samuel Gutridge farm. By swabbing they recovered 55 bbls. the ensuing 24 hours. In Section 22, the Carter Oil Co. is drilling No. 5 on the A. Watts farm. In Section 21, Madison Township, Perry County, the Atha Oil Co. has started to drill to the Clinton sand No. 12 on the Melick Brothers' farm. In Section 18, Washington Township, Monroe County, the Sylvan Oil & Gas Co. completed No. 7 on the James H. Anderson farm. It is not good for more than 2 bbls. a day in the Keener sand.

At the close of the week, the southwestern Ohio fields completed nothing better than light pumpers. In Newport Township, Washington County, O. S. Reckard & Co. got a 5-bbl. in the Keener sand at No. 10 on the F. F. Dana farm. In the northeast quarter of Section 34, Falls Gore Township, Hocking County, the Old Town Oil & Gas Co.'s No. 3 on the George Tucker farm is a fair gasser in the Berea grit. In Section 6, Washington Township, Monroe County, Herman Hill and others have a duster in the Big Injun sand at a test on the Daniel Knowlton farm.

Duster in Athens County

In Section 16, Alexander Township, Athens County, J. A. Ronhausen & Co. have Berea grit duster at a second test on the J. H. Wood farm. In Section 13, Bowling Green Township, Licking County, the Midland Oil Co. is starting another test on the Frank L. Orr farm. In Hanover Township, the Carter Oil Co. drilled No. 6 on the Jacob Vanderbark farm 40 feet into the Clinton sand and showing for a good producer.

In Section 20, York Township, Morgan County, the Pure Oil Co. completed and shot in the Berea grit No. 5 on the Clarence Fye farm. It is an 8-bbl. pumper. In Section 4, same township, the same company has completed in the same formation No. 4 on the Ernest Bell farm. It is a fair gasser. In the old Wellsville Pool, Yellow Creek Township, Columbiana County, A. S. Lynn drilled a test on the Edna A. Carnes farm through the Berea grit, and showing for a very light pumper.

Pumper in Muskingum County

In Section 2, Harrison Township, Muskingum County, James W. Buck completed and shot in the Berea grit No. 8 on the G. H. Harrop farm. The well produced 12 bbls. the first 24 hours. In Section 25, Alexander Township, Athens County, C. H. Beasley & Co.'s No. 7 on the W. D. Whaley farm is a 5-bbl. pumper in the Berea grit. In Section 29, York Township, Morgan County, the Pure Oil Co. completed and shot in the Berea grit No. 3 on the Ernest Bell farm. It is a gasser.

Drilling Tests

One-half mile north of production, in Lot 5, Madison Township, Licking County, Haynes Brothers are drilling a test for a Berea grit producer on the J. W. Neighbarger farm. In Lot 7, same township, J. T. Bebout is drilling a test on the W. A. Adams farm, located in gas territory east of Newark. In Section 20, Alexander Township, Athens County, Cook & Co. started to drill a test on the Mary J. Brooks farm. In the Fisher Pool, in Lot 75, Athens Township, Athens County, the Southern Oil Co. is drilling another test on the M. Murphy farm.

Southwest Pennsylvania

All interest in the southwest Pennsylvania fields during the week was centered in the Rutan and Anderson farm gushers in Morris Township, Greene County. The Rutan farm well had dropped to 90 bbls. a day and was drilled a little deeper and the production increased to 225 bbls. The Consumers Fuel Co.'s well on the Anderson farm, which had an initial production of 410 bbls. and then declined to 225 bbls. a day, was drilled into a second pay and its production increased to 665 bbls. At the close of the week the production had dropped to 275 bbls. a day.

In Aleppo Township, Greene County, the Carnegie Natural Gas Co. completed to a total depth its test on the C. J. Behm farm. It is a light gasser in the Bayard sand. In Springhill Township, Boundy Brothers' test on the Henry Riggs farm is a gasser in the Gordon sand. In the same township, the Dunmar Oil Co.'s second test on the Berney Renner farm has been completed and shot and showing for a producer in the same formation.

In Findlay Township, Allegheny County, E. L. Oles completed a test on the O. R. Degelman farm. It is a light gasser. In Ross Township, Walley & Hahn's test on the King farm is a fair gasser in the third sand. In South Beaver Township, Beaver County, the Bruin Oil & Gas Co. has a duster at a test on the Bluem farm.

Experience shows the value of Kelly Caterpillar tires

The superiority of Kelly Caterpillar tires is readily established by experience with them, whether it is on your own trucks or on the hundreds of Caterpillar-equipped trucks owned by others.

By experience the Apex Motor Fuel Co., Chicago, has learned that Kelly Kats give satisfactory service under the most trying conditions. This company says: "We know the non-skid feature to be of big advantage during the slippery weather, and find the tires standing up under heavy loads which they must necessarily carry."

The side-vent construction, originated and perfected by Kelly, enables Caterpillars to grip greasy or icy pavements and deliver their loads safely and quickly.

These same side-vents take hold of any road surface—even the terrible mud roads so often found in some of the oil fields. Here experience has shown that Kelly Kats get through promptly, the bad stretches where ordinary solid tires slip and slide and delay the delivery of equipment and supplies.

Wherever oil is produced or distributed, experience shows that Kelly Kats give superior service.

There are no Caterpillar tires but Kelly Kats

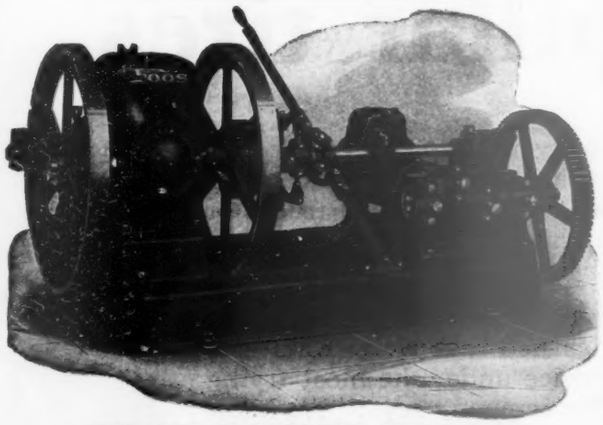
KELLY-SPRINGFIELD TIRE CO.

250 West 57th St. New York, N. Y.

"The Kelly Caterpillar tires we are using on our trucks," writes the Apex Motor Fuel Co., "are giving satisfactory service." Kelly Kats do not discriminate. The service they offer to one truck owner is offered to any or all who use Kelly Kats.

KELLY KATS
TRADE MARK REG
THE TIRES WITH NINE LIVES

THE FOOS



FOOS POWER PUMPS

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For complete details of this and other FOOS oil-country outfits write for Bulletin G-94.

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STANDARD OIL BOOKLET

This Booklet contains description of properties, annual reports for 1924, dividend rates, price ranges and other important information relative to this group of companies.

CARL H. PFORZHEIMER & CO.

(Specialists in Standard Oil and Miscellaneous Oil Securities)

25 Broad Street New York, N. Y.

IS NOT WITHDRAWING FROM SOUTH DAKOTA

Denying that the Standard Oil Co. of Indiana intends to withdraw from the State of South Dakota or to enter into politics either in that State or any other, Chairman Robert W. Stewart of the company, in a speech to the company's South Dakota employes at Huron, outlined the company's position with respect to the State's operations in the oil industry.

Chairman Stewart said he did not impugn the motives of Governor Carl Gunderson, but he did question decidedly the wisdom of the policy which has brought about the conflict between the Governor and the industry. He cited the exodus of capital from the State to escape heavy tax burdens and to protect property from "semi-confiscation which the socialistic tendencies of the legislative and administrative bodies are rapidly approaching." He compared this situation with that of Florida, with its great increase in population and wealth. He emphasized Florida's rapid progress as being due neither to greater resources than South Dakota's, nor to climatic attractions, but to the fact that a legislature there came into being with vision to interest capital in the State. And it is the much-reviled business institutions which have given to the American people of all classes the highest standard of living and the greatest material comforts and advantages ever enjoyed by any people, he declared.

He explained the recent dissatisfaction in the oil industry and declared the State's activity tended to throw the industry into still greater demoralization. He pointed out the essential difference between the kind of service oil companies were giving and that of the State. He admitted that private competition in the industry had grown so severe that perhaps there were too many distributing outlets and that a monopoly might function more efficiently, but denied the management favored monopolistic tendencies, simply pointing out that completion is impossible without its logical outgrowths.

SOUTH MANCHURIA SHALES

South Manchuria Railway Co. reports that the mines in Fushun have 5,500,000,000 tons of oil shale containing 6 per cent of oil equal to 330,000,000 tons. Japan consumes a million tons of oil shale a year, including 400,000 by the Navy. If one-third of the oil contained were extracted, it would, it is said, last a century at the present rate of consumption. The Navy authorities are naturally interested and the railway company, which conducts the surface mining at Fushun, will have to remove the deposit to get at coal imbedded beneath. The difficulty is in connection with financing. In order to produce 2,000 tons per day, which is necessary to make both ends meet, Yen 6,500,000 must be invested.

COMPETITION IN AUSTRALIA

The Vacuum Oil Co. interests have decided, says an Australian report, upon an extensive distribution scheme embracing Australia and New Zealand and involving an outlay of $10,000,000. The central depot for Australia will be at Yarraville. On the announcement of this scheme the British Imperial Oil Co. stated that it has under construction new seaport installations at Brisbane, Fremantle, Wellington and Auckland; and that delivery would shortly take place of bulk railway tank cars and of bulk receiving tanks from England.

RUSSIAN OIL FOR TURKEY

Moscow reports that an agreement was recently made in Constantinople between the Municipality of Smyrna and the Russian Naphtha Syndicate by which the latter supplies the city with all its mineral oil requirements. This takes Russia into the territory where Standard Oil interests have hitherto been predominant; and according to the Journal d'Orient, the Standard is determined to defend its threatened supremacy.

OIL PIONEER PASSES, DRAKE'S CONTEMPORARY

TOLEDO, Ohio, Sept. 19.—Charles Bruce McKinney, 88, died Tuesday morning, September 15, at the home of his daughter, Mrs. L. H. Bacon, this city, from infirmities of old age. He was born at Salem, Pa., April 15, 1837.

Mr. McKinney was a classmate of the late William McKinley at Allegheny College, Meadville, Pa., in 1856-1857. He was married in 1870 to Miss Lulu Brandon at Enterprise, Pa., and their golden wedding was celebrated five years ago. Mrs. McKinney died in 1921. Mr. McKinney was a pioneer oil man, being connected with the industry from the drilling of the original Drake well on Oil Creek, near Oil City, Pa. He moved to Ohio in 1892, when the oil business knew this region as a "frontier" state. He was financially interested in the third well drilled on Oil Creek, and has continued oil operations in the old Trenton Rock fields of northwestern Ohio, in company with his two sons, up to his death.

IODINE FROM OIL RESIDUE

It is stated in a Riga message that the Russian engineer Constantinoff, member of the Geological Committee of the Russian Government, has greatly improved his electrolytic method of extracting iodine from oil-bearing residues. The discovery makes it possible to reduce the cost of manufacture of iodine to one-fourth of the present figure; but it is to be expected, says the London Oil News, that the general world price will fall on account of the large quantity to be produced by Mr. Constantinoff's process.

NEW PUMPING STATION

BOLIVAR, N. Y., Sept. 19.—The Tidewater Pipe Co., Ltd., has purchased from Crooks & Turner 3 acres of land near the new State road at Myrtle, Pa., where it has begun the erection of a pumping station. The company will also build two iron storage tanks, one 2,500 and the other 5,000 bbls. Charles Grinsby of Bradford, Pa., is in charge of building operations. The pumping stations at Honeoye, Little Genesee, Streeter Brook and Horse Run will be discontinued when this new station is completed.

MORE GASOLINE TAX IN FRANCE

The French Ministry of Finance is again active concerning an increase in the "circulation" (distribution) tax on motor spirit, now 24 francs per hectolitre. Other Government departments, however, are opposed to this. France is among the European countries where petrol is most dear and most heavily taxed; and practically no other commodity is so heavily taxed in France.

DRILLED WRONG PROPERTY

From correspondence in the London Financial News it appears that a deep well at Ras Bahar, drilling of which was begun by Oilfields at Egypt, Ltd., is really on property under license by the Egyptian Government to Anglo-Egyption Oilfields, Ltd. The discovery was made after the well had reached 1,000 feet; and the error was partly responsible for the collapse of the former company.

STATE TO LEASE LAND

Commissioners of the land office of Oklahoma will receive bids until September 29 on the four quarter sections of Section 36-19n-4e and until October 6 on the four quarter sections of Section 36-22n-1w.

RUSSIAN OIL FOR ITALIAN NAVY

A Moscow message states: Negotiations for supplying the Italian Navy with Soviet oil over a long period are near conclusion and signature of the agreement is expected immediately.

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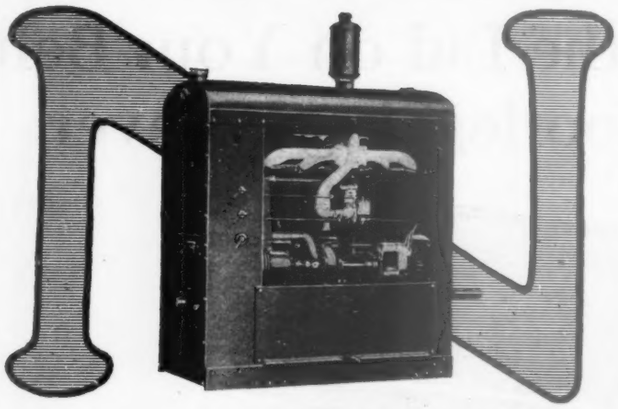

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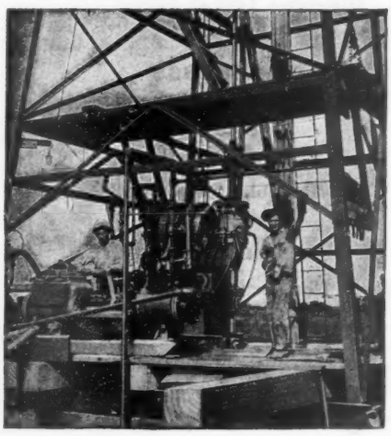

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LOUISIANA-ARKANSAS

(Continued from Page 40)

abandoned No. 1 Louisiana Live Stock & Plant Co., Section 8-19-16, at 3,712 feet, a test 6 miles southwest of Mooringsport.

In the old Caddo Field, Louisiana Oil Refining Corp. set 6-inch at 2,178 feet in No. 17 Green, Section 27-20-16; Standard Oil Co., drilling at 2,350 feet in No. 173 Stiles, Section 27-21-16, and The Texas Co. at 3,035 feet in No. 58 Levee Board, Section 27-21-16.

Claiborne Parish

Twelve miles east of Homer, near Lisbon, the Ohio Oil Co. is drilling at 2,260 feet in No. 1 Patton, Section 23-21-15.

De Soto Parish

Dixie Oil Co. set 12½-inch casing at 150 feet in No. 1 Jenkins, Section 9-12-11, on the eastern edge of the Naborton Field.

Fortuna Oil Co., drilling at 3,655 feet in No. 1 Alexandria, Section 32-15-15, 5 miles east of Logansport.

Gulf Refining Co., drilling at 4,165 feet in No. C-18 Willis-Williams, Section 31-13-11, the deepest test ever made in the old Naborton Field.

Jackson Parish

El Dorado-Chief Oil Co. is drilling at 3,500 feet in No. 1 J. H. Rhymes, Section 13-14-4w, 3 miles south of Jonesboro.

La Salle Parish

Beckman and others set 10-inch at 40 feet in No. 1 Urania, Section 22-10-1e; Craig and others set 10-inch at 80 feet in No. 1 King, Section 36-10-1e; Dixie Oil Co., down 50 feet in No. 1 L. & A. Oil Co., Section 29-9-2e; Finn & Ball, shut down for water at 1,510 feet in No. 1 King, Section 25-10-1e; Imperial Oil & Gas Co., drilling at 2,400 feet in No. 1 Urania, Section 10-10-2e; Urania Petroleum Co., rigging up to drill No. 9 Urania, and derrick up for No. 10, Section 19-10-2e.

Morehouse Parish

R. C. Boisseau is drilling at 1,730 feet in No. 1 Sullivan, Section 11-21-7e, 10 miles northeast of Bastrop.

Ouachita Parish

In the Monroe gas field, the Carson Carbon Co. is rigging up to drill No. 1 Woodley, Section 4-19-5e; Culver and others, drilling at 300 feet in No. 1 Cordell, Section 23-16-3e; Sam D. Hunter, derrick up for No. 1 D'Arbonne, Section 32-19-3e; Southern Carbon Co. set 6-inch at 2,110 feet in No. 3 Kerr, Section 12-19-4e, and Union Gas & Power Co. set 6-inch at 2,180 feet in No. 1 Lewis, Section 15-10-5e.

Red River Parish

Clark & Greer set 6-inch at 1,650 feet in No. 1 LeGrande, Section 2-14-12, half way between the Elm Grove and Naborton Fields.

Sabine Parish

L. M. Emlet, arranging to set 8-inch at 2,605 feet in No. 2 Bowman-Hicks Lumber Co., Section 8-7-12, 7 miles northwest of Many.

Union Parish

Natural Gas Producing Co., drilling at 2,150 feet in No. 3 Grayline, Section 32-22-4e, and rigging up to drill No. 1 Union Parish School Board, Section 16-21-4e; R. H. Rhodes, drilling at 2,135 feet in No. 1 W. M. Jones, Section 6-23-2w, and Ruston Drilling Co. drilling at 800 feet in No. 1 Ford, Section 8-20-4e.

Winn Parish

Ohio Oil Co., drilling at 3,030 feet in No. 1 Rowland, Section 5-12-1w, 12 miles northeast of Winnfield.

Webster Parish
Cotton Valley District

Fortuna Oil Co., drilling in rock at 3,120 feet in No. 1 Bible, Section 8-20-10; arranging to pump No. 3 Cox, and drilling at 2,350 feet in No. 4, Section 15-21-10; J. F. Giles, trustee, drilling at 2,500 feet in No. 1 Weghost, Section 20-23-11; Humble Oil & Refining Co., drilling at 2,455 feet in No. 21 Bodcau, Section 15-21-10, and 2,300 feet in No. C-2 Bodcau, Section 13-21-10; Louisiana Oil Refining Co. has derrick up for No. 2 Jackson, Section 27-21-10; Ohio Oil Co., arranging to pump No. 16 Gray, Section 26-21-10, and drilling at 1,250 feet in No. 17, same section, and set 6-inch at 2,515 feet in No. 1 Sandlin, Section 27-21-10.

Palmer Corp., drilling at 4,180 feet in No. 1 Davis, Section 23-21-10, and Woodley Petroleum Co. at 2,165 feet in No. B-1 Gray, Section 27-21-10.

Arkansas Wildcats, Bradley County

Gulf Refining Co., drilling at 1,645 feet in No. 1 Benson, Section 25-15-9, 16 miles south of Warren, and The Texas Co. at 3,105 feet in No. 1 Sabine Lumber Co., Section 11-16-10, 4 miles south of the Benson well.

Calhoun County

Genthre and others set 6-inch at 2,700 feet in No. 1 Freeman Lumber Co., Section 24-15-15, 3 miles north of the Smackover Field.

Gulf Refining Co., drilling at 1,150 feet in No. 1 Freeman Smith Lumber Co., Section 31-15-13, 13 miles northeast of El Dorado. Jewett and others, drilling at 1,500 feet in No. 1 Freeman Smith, Section 35-15-13, 11 miles southeast of Hampton, about 1 mile north of Murdock's well on the Eagle Lumber Co. lease in Section 29-12-15.

Magnolia Petroleum Co. is drilling at 200 feet in No. 1 Calion Lumber Co., Section 29-15-14, 5 miles east of the Smackover Field.

Columbia County

In the Stephens Field, Hude & Aarnes are trying to pull liner in No. 2 Brown, Section 13-15-20, at 2,160 feet, and the Magnolia Petroleum Co. is drilling at 2,125 feet in No. 3 Rhinehart, Section 36-15-20.

Pluto Oil Co. is drilling at 1,000 feet in No. 2 Robinson, Section 23-18-23, 9 miles north of the Louisiana line.

Drew County

McClintock & Goodka are drilling at 1,800 feet in No. 1 Ogle, Section 35-13-5, 13 miles southeast of Monticello.

La Fayette County

Arkansas Fuel Oil Co. has a slight showing of oil at 2,783 feet in No. 1 Allen, Section 18-19-24, 2 miles east of Bradley.

Humble Oil & Refining Co. is drilling at 2,195 feet in No. 1 Reed-Bodcau, Section 16-15-22, and rigging up to drill No. 2 Bodcau Fee, in Section 9-15-22.

Miller County

Humble Oil & Refining Co. is drilling at 1,600 feet in No. 2 Fouke, Section 2-16-27, 9 miles southeast of Texarkana.

Nevada County

Magnolia Petroleum Co., drilling at 2,560 feet in No. 1 B. F. Johnson, Section 3-15-21, 20 miles south of Magnolia.

Steele and others are testing 15 feet of broken sand at 1,685 feet in No. 1 Fincher, Section 9-15-22, 15 miles northeast of Lewisville.

CALIFORNIA FIELDS

(Continued from Page 46)

No. 19, drilled to 4,960 feet, and something definite will be learned of its potentiality a little later in the week. The Chiksan Oil Co. is still working patiently in the Richfield district with Nos. 3 and 4 Bradford, both of which are handicapped with mechanical trouble. No. 20 on Kraemer lease, No. 2 of the Standard, in this area is in a very hard sandy shale and as a result only 1,342 feet of hole has been made to date. No. 2 Morse of the Union is being reamed to bottom, 4,370 feet, and will be given a test within a short time. The company's No. 4 Coyle & Bogue, spudded in a few weeks ago, is standing cemented at 1,230 feet.

J. M. Nelson is abandoning his No. 1 Davis, offsetting the Empire Drilling Co.'s No. 1 Mesa at Newport, and is relinquishing his lease, satisfied that commercial production is not obtainable. Davis went to 1,235 feet and set the 8¼-inch at 1,100 feet, at which depth the production test was made. The Marine Oil Corp. has carried its No. 53 Waterman to 1,152 feet and will land a string of casing at 1,030. No. 101 Fox, of the Associated, in the Beverly Hills section of the Salt Lake Field is standing at 5,084 feet, while cable tools are being rigged up. Drilling will be resumed shortly but the outlook does not look any too promising. The Associated's No. 1

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Hellman, at Seal Beach, is down 5,450 feet and going ahead in a coarse sand. No. 3 Bryant, of the Shell, the deepest hole in this area, closed the week at 6,740 feet.

The Obispo at Maricopa is still at work endeavoring to return its No. 6 to production in the deep sand believed to have been responsible for the large production secured a month or so ago. A string of 6¼-inch has been landed at 2,613 feet and the company has hopes of being in a position to finish the hole shortly. A heavy sand pushed up into the hole by a heavy gas pressure has been a source of contasnt trouble to date. The Trojan Oil Co. should start bailing its No. 2, a deep sand well, sometime during the coming week as it has been finished at 4,400 feet and a 4¼-inch oil string run in. The General Petroleum has purchased the holdings of the Midway Pacific Oil Co. adjoining the Obispo's lease and early development work is anticipated. A large cash consideration was involved. The company started two holes, No. 10 Annex, and No. 14-B Essex, down to the Obispo sand a week or so ago and both are going ahead rapidly. The Midway Northern has not yet made any attempt to start new development work but will rather wait on the outcome of the Obispo's deep test. The California Petroleum is building a rig on Section 32-12-23, this action being in line with the new development started by the Obispo. The Associated will probably wait a little longer before starting any intensive development work on its recently acquired Atlas property, although one well may be deepened a little later.

In the Hovey Hills area, the Formax finished drilling its No. 21 on Section 36-32-23, and it will be given a test sometime during the coming week. The Belridge Oil Co. has temporarily suspended operations on Section 32-32-23. In the Midway Field proper the Federal Drilling Co. had the good fortune to boost the production of its No. 1 from 300 bbls. to around 700 bbls. by running in a short 3-inch liner. This well, which opened up deep drilling in the immediate area, started off during the early part of the summer flowing around 1,500 bbls. a day but developed sand trouble later and registered a substantial drop in gas pressure, following the completion of an offset by the Pacific Oil Co. The Federal is still having trouble finishing its Nos. 2 and 3 on this same property and it does not look as though either will be good for large production as they are both farther out on the structure than No. 1. The Honolulu Consolidated increased its daily production in this area 465 bbls. as the result of the completion of two pumpers, Nos. 13 and 83, both located on Section 4-32-24. The former, drilled to 3,101 feet, came in flowing 280 bbls. of 26.2 gravity oil, while the latter, completed at 3,386 feet, was good for 185 bbls. of 26.8 gravity oil.

The Pacific experienced a good week and added 3,635 bbls. to its daily production. This increase was due to the completion of well No. 20 in the deep zone at 4,700 feet and the recompletion of well No. 1, redrilled and deepened to 4,770 feet. No. 20, flowing a one-inch bean under a pressure of 180 pounds, tanked 1,460 bbls. during its initial test, while No. 1, flowing through a 1⅛-inch bean under a pressure of 160 pounds, tanked 2,175 bbls., the oil in each case testing 23.2 degrees in gravity. These two wells are located on Section 19-31-24, adjoining the Federal Drilling Co.'s lease on the west. The Gilmore Oil Co. finished driling its well No. 3 on Section 27-31-22 but, inasmuch as it is necessary to put it on the beam, the test will be delayed for another few days.

The Standard successfully finished its No. 19 in the Wheeler Ridge Field, Section 27-11-20, and brought in a 125-bbl. pumper. The oil, which is coming from 2,215 feet, tests 10.1 degrees and shows a cut of 2 per cent. The Union is rigging up its No. 12 at Elk Hills, Section 26-30-24, but actual spud has not yet been made. The Pan American is going ahead nicely with No. 2 on Lease K, Section 1-31-24, and reports a depth of 2,520 feet. The Gross Drilling Co. has just passed the 1,200-foot level with its No. 2 on Section 26-30-24, and expects to duplicate No. 1, which was finished a month or so ago in what was considered extremely doubtful territory. In extending the field limits the well incidentally proved up the Union's Federal lease adjoining.

Ventura County

The Associated featured the week with a big well on its Lloyd property in the Ventura Avenue Field and, although the Shell also added a new producer to its list, the output was much smaller than that secured by the Associated. No. 31 Lloyd, of the latter, is credited with an initial tankage of 2,348 bbls., the oil testing 29.6 degrees and showing a cut of 1 per cent. This hole was carried down to 4,877 feet, a string of 8¼-inch being used to shut off water at 4,293 feet and 4-inch pipe utilized as an oil string. In addition to the crude produced, the well is making a little better than 3,000,000 feet of gas per day. This field is noted for its large gas production and, while a good pressure is always desired in flowing wells, it sometimes proves quite troublesome, especially just previous to the completion of the well. Operators are all using extra heavy rotary mud and the precautions taken to prevent premature flows have a tendency to retard drilling. The Associated only succeeded in bringing in No. 31 Lloyd, under control after a long, hard 10-day battle, during which time the gas threatened to blow the tools out of the hole. The well was characterized by old-time drillers as one of the wildest they had ever seen. The Associated finished rigging up No. 101 Lloyd sometime ago but actual spud has not yet been made. The company's remaining drillers on this property are No. 8 at 4,700 feet, No. 17 at 5,201 feet, No. 18 at 5,190 feet, No. 21 at 3,740 feet and No. 22 at 4,250 feet. Rigs are going up for Nos. 11 and 20.

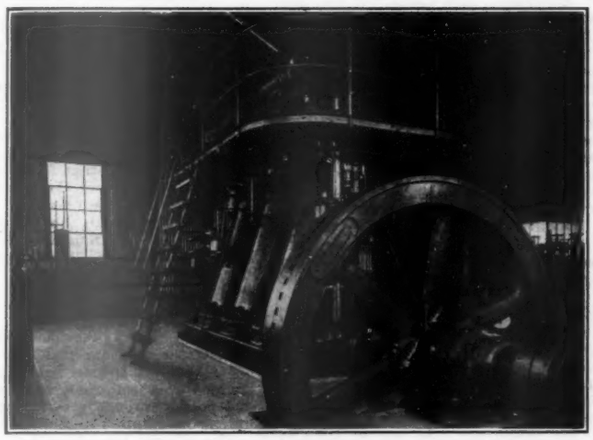
The Shell's new completion, No. 9 Taylor, drilled to 4,880 feet and finished with a 6⅛-inch oil string, extended the limits of the field about 500 feet west. This property is not productive of unusually large wells, completions ranging anywhere from 100 to 1,000 bbls. a day. New wells are quite consistent, however, and do not show as sharp a decline as some others located in the more prolific section of the field. The Shell's latest acquisition is rated at 638 bbls., the oil being clean and testing 28.7 degrees. A new rig is going up for No. 10 Taylor, and it will probably be spudded in sometime within the next three weeks. The company's lone driller on the Edison property is No. 3, going ahead at 4,335 feet. The Gosnell lease is credited with six drillers, No. 7 at 4,821 feet, No. 8 at 5,082 feet, No. 10 at 4,464 feet, No. 11 at 3,805 feet, No. 16 at 4,135 feet and No. 17 at 5,560 feet. No. 4-A Barnard, of the General Petroleum, is showing considerable oil and gas at 4,614 feet and looks good for early production. The company's three holes on the Notten property are not yet deep enough to be of interest, No. 7 going ahead at 4,396 feet, No. 8 at 3,100 feet and No. 9 at 4,100 feet.

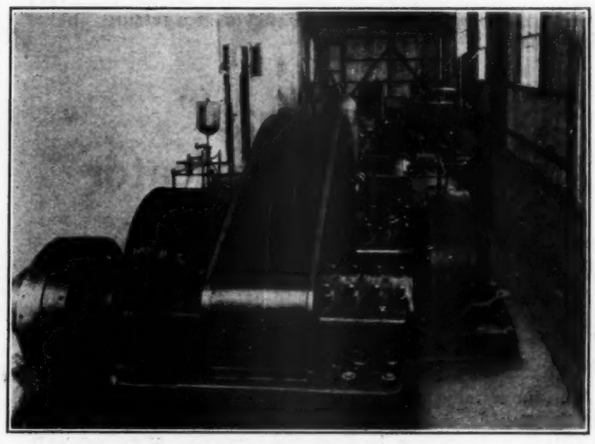
The Chanslor-Canfield Oil Co. resumed drilling on its No. 1 Hobson, a wildcat, on Section 22-3-24. The bottom of the hole is at present around 800 feet. It is understood that the Milham Exploration Co. will inaugurate development work soon on its holdings east of the Ventura Avenue Field. Failure of this company to secure production in its wildcats at Rosecrans and Playa del Rey should result in early work in Ventura County, as they will apparently keep two strings of tools in operation. The Oakridge reports a slight showing of gas in its No. 1 McFarland, at 5,462 feet but nothing has been found so far that looks like oil.

The Tehmescal Petroleum is going ahead in its well No. 2 at 1,936 feet following a small flow by heads from 1,868 feet a short time ago. E. J. Miley is drilling ahead in his Red Mountain test at 2,271 feet.

None of the wildcatters at Bandini re-

FULTON DIESEL In Pipe Line Service





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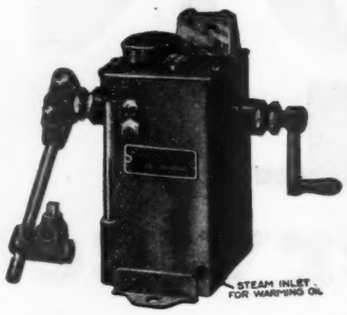


It supplies clean, fresh oil to the engine cylinder regularly and in just the right quantity to give efficient lubrication.

Starting the moment the engine starts, it speeds up, slows down and stops with it, always supplying oil in proportion to the engine's speed.

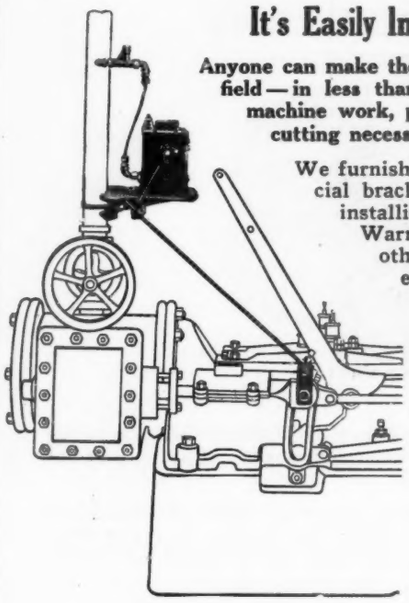
Day or night—winter or summer—it's on the job every minute, requiring no attention, never forgetting, never falling asleep.

The "Manzel" Force Feed Lubricator

Lubricates drilling engines, mudhogs, air and gas compressors, pumps, etc., automatically and efficiently, using 30 to 60% less oil than ordinary lubricators.

You can't waste oil with it and after it is installed you can forget all about your engine lubrication, for the "Manzel" will see to it that the cylinder is lubricated and lubricated right.

The most inexperienced helper can take care of it, for after the supply is once adjusted to suit your engine, there is nothing to do except to keep the reservoir supplied with oil.



It's Easily Installed, Too!

Anyone can make the installation—in the field—in less than half an hour. No machine work, pipe fitting or thread cutting necessary.

We furnish (when desired) special brackets and fittings for installing on Oil Well, Ajax, Warren, Acme, Lucey or other drilling engines, either single or twin type. In less than thirty minutes after you receive the "Manzel" Lubricator, it can be installed on your engine and your lubrication troubles will be over.

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ports any favorable indications in the tests in that area during the past week. No. 1 Couts, of the Oakridge, the deepest of the trio of wells being put down, is going ahead in a sandy shale at 3,868 feet. No. 1 Vail, of the Superior, is next in depth at 3,600 feet, while No. 4 De Baker of the Bandini is the shallowest at 2,340 feet. The Superior is setting boilers and erecting a rig for No. 1 Anderson, a new test to be drilled at Belvedere Gardens. This territory looks quite promising and might bear watching. The Elbe Oil Co.'s wildcat west of Culver City is drilling ahead in a brown shale streaked with sand at 3,197 feet. The Huntington-Downey Syndicate will plug back its test at Clearwater to the 3,000-foot level and make a test at this point before abandoning. The Midway Gas Co. has suspended work on No. 1 Luezinger, its Hawthorne gas well at 3,550 feet, and it is understood the company will pull out.

It is reported that the California Petroleum will drill a test somewhere in the vicinity of Hermosa but due to the fact that leasing arrangements have not yet been completed the exact location is not available. The Calny Oil Co. has not yet resumed work on its Irvine wildcat, which was suspended sometime ago at 4,247 feet, and it is believed that the suspension will stand pending further development work. The Petroleum Securities has resumed drilling in No. 1 Narbonne at Palos Verdes, confident that the new colors found around 950 feet were not of sufficient thickness to warrant production. No. 1 Crest of the same company at Palms is going ahead at 3,820 feet. The Milham Exploration Co.'s hole at Playa del Rey is down 5,339 feet, the present formation being a brown shale streaked with sand. This looks like an early abandonment. No. 1 Von Schriltz, of the Standard, at Santa Ana Gardens looks rather disappointing at 4,356 feet, as it has not even shown a color from the grass roots down. There were no developments of particular interest in the Newhall sector where the Associated is drilling ahead at 5,357 feet and the Union is installing rotary equipment on its hole which has been carried down to 2,900 feet. W. W. Stabler is preparing to land 500 feet of 15½-inch casing in his No. 1 Castaic before going ahead farther.

Northern California Wildcats

The Chanslor-Canfield Midway Oil Co. is preparing to make another test of its wildcat at Delano and if a shut off has been effected something definite should be determined of its oil possibilities soon. The Standard's two prospect holes out on the McKittrick front, Section 25-29-21, are in good mechanical condition, No. 1 going ahead at 3,901 feet and No. 2 at 3,780 feet. On Section 30-29-22, the Barnsdall is redrilling its 3,459-foot hole about 400 feet off bottom. North of Lost Hills, the Standard has temporarily suspended operations at 2,875 feet but will probably resume work again shortly. The Main Oil Co. is building a rig for its second test at Wasco, Section 28-27-24. No. 1, the initial hole on this property, is standing capped at 5,305 feet, from which depth it has from time to time showed a production of dry gas.

The Associated has suspended work on one of its tests at Raisin City, Section 26-15-18, at 6,089 feet but is going ahead on Section 14-15-18 at 6,340 feet. The Fresno-United Oil Co., on Section 23-15-18, landed a string of 4¾-inch at 5,391 feet and will make a test of the slight showings found around this depth. The Associated's wildcat on Section 15-16-19, near Caruthers, is drilling ahead at 5,460 feet, while the company's hole at Kerman, Section 35-13-26, is being pushed ahead at 5,467 feet.

The General Petroleum seems in a fair way to recover from the fishing job which has been holding up progress at Kettleman Hills for the past several months. The bottom of this wildcat is 6,407 feet, at which depth some 3-inch drill pipe was lost while going ahead. Considerable time was spent endeavoring to recover the fish but the attempt was finally given up and orders issued to sidetrack. The company is still about 300 feet off bottom but is making such good progress that the superintendent has hopes of being in a position to make new hole within the near future. The Associated on Section 12-23-18, and the Bolsa Chica on Section 30-23-19, are both waiting the outcome of this hole. Marland is cleaning out its test on Section 12-22-17, several miles away, at 5,312 feet.

Number 1 Williams, of the Marland in Santa Barbara County tested wet at 2,645 feet and another cement job will be necessary. The Stone-Goodman well in this same county, Section 31-9-32, is going ahead in a hard, sandy shale, at 3,180 feet. H. E. Becker is preparing to land a surface string in his Summerland test at 650 feet. Considerable interest attaches to the report that Harriman-Jones Oil Co. will make a production test shortly of its wildcat in Monterey County, Section 20-19-6, and, although a core looked quite favorable, it is the consensus of opinion that the test will be unproductive. The San Martinez is going ahead with its Yolo County test, Section 36-11-1, at 4,200 feet.

CANADIAN FIELDS

(Continued from Page 48)

Leod syndicate is drilling at 2,300 feet on McLeod No. 2, half a mile south of Royalite No. 4. Vulcan Oils, Ltd. is drilling at below 1,800 feet on an offset to Royalite No. 4.

Harvey S. Price and associates have secured 1,400 acres of territory in the Moose Mountain district from the Alberta Foothills Development Co. and will bring in an outfit for a deep test.

In the Far North, no further report has been received from the Imperial Oil, Ltd. Discovery No. 2 test below Fort Norman; but it is presumed that this test is being drilled deeper.

Many Islands Lake

In the Many Islands Lake Field, northeast of Medicine Hat, Many Islands Oil & Gas Co. Drazan No. 1 is continuing as a deep test, after the diamond drill had passed through several sands showing traces of oil.

The Alberta Pipe Line Act, passed at the last session of the provincial legislature, has been officially proclaimed. It provides that all oil and gas lines constructed under the act shall be common carriers. Regulations will be made by the Government providing for inspection of lines and prescribing the pressure to which they may be subjected.

Construction work is progressing on the new refinery of the Arro Refining Co. at Coutts, Alta. This is the second refining plant at Coutts, the Alberta Refineries, Ltd. having already been in operation for more than a year. O'Neill Brothers of Suburst, Mont., have taken over the Standard Refining Co. plant at Lethbridge with a capacity of 400 bbls. a day and will operate it in conjunction with the International Refinery at Sunburst.

British American Oil Co., Ltd. of Toronto, has declared a dividend of 50 cents on registered certificates and 50 cents on warrants, payable October 1, to shareholders of record September 15.

ONLY BIG WELL OF THE WEEK IN SMACKOVER IS IN GRAVES SAND

(Continued from Page 38)

show of oil found from 2,780 to 2,783 feet.

The record of a number of Smackover drilling wells at interesting depths includes the following:

The Humble Oil & Refining Co.'s No. 7 Hildebrand, SW SE SW Section 8-15-15 stands 1,200 feet in oil and was awaiting standard rig. It has sand at 2,431-38 feet.

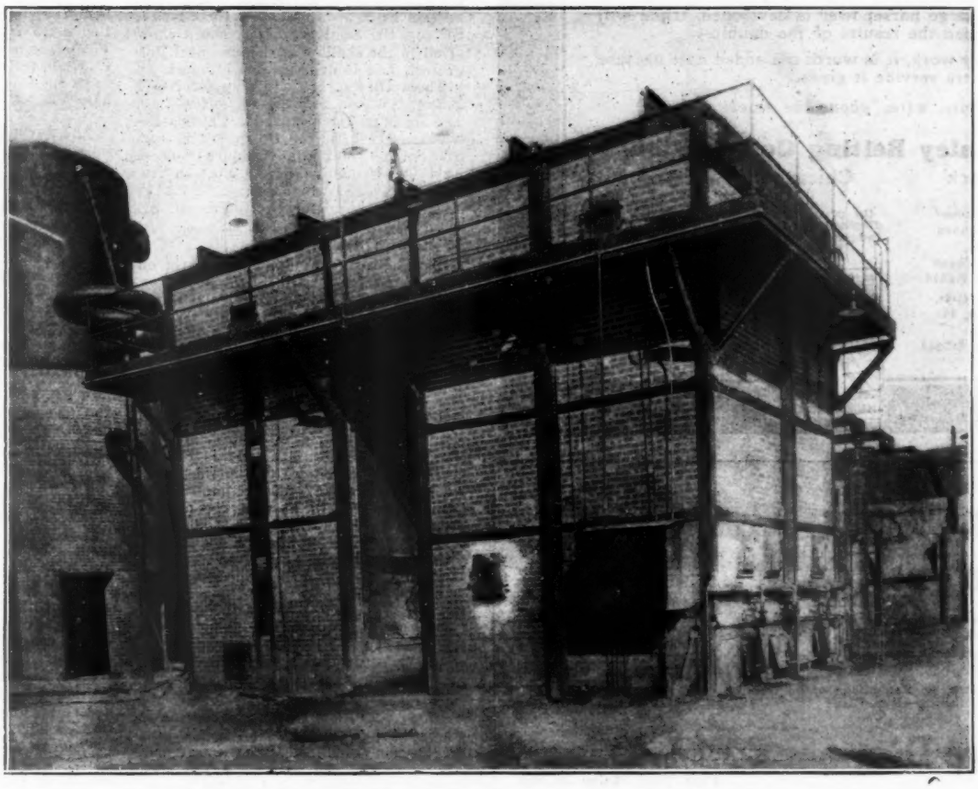
The Sun Oil Co.'s No. 6 Johnson, SW SE SE Section 30-15-15 tested salt water at 2,608-15 feet and was shut down awaiting orders.

The Standard Oil Co. of Louisiana was drilling at 3,120 feet in No. B-5 Umsted, SE NW Section 32-15-15.

Crosbie and others were shut down at

FOSTER

TUBE STILLS



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Ordinary tube stills are used for light cuts of 20%, but Foster Tube Stills are successfully taking an overhead of 90% of the thruput without cracking.

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Double or Triple?

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These operators found as you have found, that STANLEY double gave them better results than they had ever had from any other belting.

However, experiments with both types of belts under approximately equal conditions showed that where a large horsepower is developed, triple will even exceed the results of the double.

For heavy work, it is worth the added cost because of the extra service it gives.

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W. R. Tucker 5311 Richard Ave., Dallas, Texas Telephone H6525 T. R. Bartlett, P. O. Box 909 Tulsa Phone Dial 3-7282	On permanent display at Tulsa Industrial Exhibition	Pacific Coast Rubber Co. 316 Mission St., San Francisco, Cal. 500 E. 3rd St., Los Angeles, Calif. Hewitt Rubber Co. of Colo. 1238 Broadway, Denver, Colo.

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Three Thousand Miles of Nye Dies

NYE—*The Die Man*
Pipe Tool Maker to the American Plumber and Steamfitter

Go down in New England, go into a plumbing shop, and you will find Nye Dies.

Go out on the Pacific Coast, go call on a steamfitter, and you will find Nye Dies.

Go south or go north, go Republican or go Democratic, go crazy or go fishing—Nye Dies!

Nye Dies

are more than a pipe threading tool, they are a national institution, like Ziegfeld's "Follies," Mr. Hughes' whiskers, and Spearmint gum.

If all the plumbers in the United States who use Nye Dies were placed end to end they would reach from Richmond, Ind., to February 27, 1964.

Go anywhere you like and you will find they like Nye Dies—because they cut easier, cut smoother and last longer than any other.

Go thou and do likewise!

HARRY G. NYE.

The tools you swear by and never at

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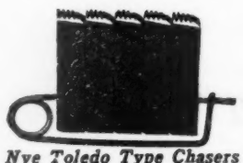

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Also fit Nos. 1 and 2 Toledo Type Die Stocks.
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Nye Toledo type pipe threaders, made in both the plain and ratchet type. Satisfaction absolutely guaranteed. Sent on free trial.

No. 1 Nye Toledo Type Threader complete ..... $9.60 net
West of Rocky Mountains..... $10.20
No. 1-A Nye Toledo Type Pipe Threader complete ..... $12.00 net
West of Rocky Mountains..... $12.75

3,295 feet in No. 12 Berry, CSL SW NE Section 33-15-15.

The Standard Oil Co. of Louisiana's No. 9 Griffin, NW NE SW was drilling at 3,032 feet.

The Marine Oil Co. shut down at 3,291 feet in No. 9 Umsted, CNL E half Lot 1, NE Section 5-16-15.

The Imperial Oil & Gas Products Co.'s No. 8 Murphy, NE NW SW NE Section 9-16-15 was arranging to bail sand at 2,598-2,625 feet.

Rowe Daniels has a 300-bbl. well in No. 5 Tatum, SE NW NE Section 7-16-15 in sand at 2,588-2,612 feet.

The Laurel Oil & Gas Co.'s No. 2 Houston, NE SE Section 12-16-16 is blowing with the aid of gas, 900 bbls. of fluid of which only 2 per cent is oil from sand at 2,602-10 feet. This is on the west edge of the field.

KANSAS

(Continued from Page 36)

tion 23-26-9. Sand was 2,155-76 feet, and the well is good for 50 bbls. Beacon Oil Co. has spudded No. 2 CSL NE NW Section 24-26-9. Simms Oil Co.'s No. 1, SE cor. SE Section 8-28-12, had a show of oil in the shallow sand found at 1,100-07 feet, and is drilling at 1,115 feet.

Theta Oil Co. has a rig up for No. 4 Pixlee, NW cor. SW SE Section 8-22-10. The rig is on the ground for Phillips Petroleum Co.'s No. 2 Pratter, NE cor. SE Section 30-22-10. Empire Gas & Fuel Co. is drilling at 850 feet in No. 1, CSL NW SW SW Section 12-22-11; and the rig is up for No. 6 Fromm, SE cor. NE NW Section 14-22-11.

Other Operations

Empire Gas & Fuel Co. has a rig on the ground for No. 6 Scott, NW cor. SE SW Section 24-23-8. Tidal Oil Co. has a dry hole in No. 1 Morris, SW cor. NW SW Section 8-23-9, at 2,600 feet. Empire Gas & Fuel Co. is rigging up No. 29 Teeter, NE cor. SE SE Section 16-23-9. White Eagle Oil Co. has completed No. 1, NW cor. SW SE Section 19-23-9. Pay was at 2,567-86 feet and the well is making 225 bbls. after a shot of 60 quarts. The rig is on the ground for the Empire Gas & Fuel Co.'s No. 2, SW cor. NW SE Section 19-23-9. Dingee and others have a rig on the ground for No. 1 Crosby, NE cor. SW Section 23-22-9. White Brothers' 'No. 2, NW cor. SE SE Section 35-22-9, had sand at 2,527-70 feet, and is estimated at 200 bbls. after a shot of 75 quarts, and the rig is on the ground for No. 4 Shambough, SE cor. SE Section 35-22-9. Mid-Kansas Oil Co. has spudded No. 1, NW cor. SW SW Section 36-22-9. Brown & Abel and the Theta Oil Co. have spudded No. 4 Pixlee, CSL NW SW SE Section 8-22-10. Davis, Hazlett and others have completed No. 7, NE cor. SE Section 12-22-10. Sand was 2,055-2,115 feet and the well made 715 bbls. the first day after a shot of 240 quarts. It is estimated at 500 bbls. Sinclair Oil & Gas Co. is drilling at 550 feet in No. 25 Browning, SE cor. NW SW Section 20-22-10, and No. 26, CSL SW Section 20-22-10, is completed for 575 bbls. in sand 2,275-2,345 feet; the rig is being built for No. 29 Browning, CSL SE SW Section 20-22-10. Titus and others have spudded No. 5, CWL NW Section 29-22-10. Phillips Petroleum Co. has built the rig for No. 2 Prather, NE cor. SE Section 30-22-10. Greenland Oil Co. has built the rig for No. 3 B-A, CEL NE NW NE Section 2-23-9, and No. 5-B, NW cor. NE NE Section 2-23-9 is completed. Sand was 2,460-2,503 feet and the well did 250 bbls. after a shot of 120 quarts. Darby & Simons have completed No. 2, CSL SE SE Section 36-23-9. Sand was 2,344-84 feet and the well was given a shot of 80 quarts. It is doing 35 bbls. Roth & Faurot's No. 1, NE cor. NE Section 16-23-10, had sand at 2,148-65 feet and water at 2,182 feet. It is being plugged back. Mission Oil Co. and others have completed No. 2-B C NE NE Section 27-23-10. Sand was at 2,241-58 feet and the well is making 40 bbls. after a shot of 60 quarts.

Mid-Kansas Oil Co. has completed No. 32, NE cor. NE Section 31-23-10. Sand was 2,296-2,355 feet and the well is making 85 bbls. after a shot of 60 quarts.

Davis and others have built the rig for No. 8 DeMalhorne, NW cor. SW Section 7-22-11. Simmons and others' No. 1-A, NE cor. NW Section 19-22-11, had sand at 2,019-55 feet and was shot with 60 quarts. It is being cleaned out and is estimated at 100 bbls. Empire Gas & Fuel Co.'s No. 1, SW cor. SE Section 19-22-11, had sand at 2,115-44 feet and is swabbing and being cleaned out. Phillips Petroleum Co.'s No. 2, SW cor. SW Section 29-22-11, had sand at 1,979-2,005 feet and is doing 25 bbls. after a shot of 60 quarts. Harwood & Winters have a dry hole in No. 1, SE cor. Lot 13, Section 7-24-8, which is dry and abandoned at 2,775 feet.

Chase County

Arkansas Fuel Co. is underreaming 10-inch casing to 1,500 feet in No. 1, C NE NE Section 19-21-8.

Marion County

Brunner & Wixon are drilling at 450 feet in No. 1 Robinson, NE cor. NW Section 31-20-5. Ramsey Petroleum Co. has a dry hole in No. 1, CSL SW NW SE Section 34-20-5, which is abandoned at a total depth of 2,575 feet. National Oil & Refining Co.'s No. 2, center of the south half south half NE Section 17-21-4, is estimated at 300 bbls. in chat 2,437-39 feet. Chris Sheedy and others have spudded No. 1-A Allison, C north half NE NE Section 24-21-4.

Lyon County

Loy & Chaney are drilling at 650 feet in No. 1, CSL SE SW Section 16-21-10.

Butler County

Marland Oil Co. & Connell have 500 feet of oil in the hole from chat 2,493-96 feet in No. 1, SE cor. NW Section 12-24-3. Bement Oil Corp. has a dry hole at 2,803 feet in No. 1, CSL SW SW SW Section 18-25-4. Gable Franks has spudded No. 1-A Nuttle, CSL NW NW SE Section 10-25-5. Leonard Oil Co.'s No. 4, SW cor. NE NE Section 32-26-5, is dry and abandoned at 2,940 feet. Safford and others have completed No. 6, NW cor. SE SE Section 26-27-4. Sand was 2,557-2,619 feet and the well made 150 bbls. naturally. Phillips Petroleum Co.'s No. 1, NE cor. SW NW Section 16-27-6, had sandy lime at 2,898-2,908 feet with 500 feet of oil in the hole. Rogers and others are drilling at 750 feet in No. 7, CSL SW NW Section 29-26-8. Cowpunchers Oil Co. has spudded No. 1, NE cor. SE Section 30-26-8. Davis and others' No. 1, SE cor. NE Section 30-26-8, had gas at 2,672-90 feet with oil in the last foot. The well is swabbing and cleaning out 60 bbls. a day of very badly cut oil and is not completed.

Hayes Roberston and others have the rig up for No. 1 Harsh, NE cor. NE Section 4-24-8. Magnolia Petroleum Co. has rigged up No. 4 Skear, SW cor. SW Section 25-27-4. Rogers and others have the rig up for No. 9 D. Bitler, CSL SE SW NW Section 29-26-8, and also for No. 10 D. Bitler, CSL SW SE NW Section 29-26-8. Harwood, Winters & Phillips' No. 1, C NE NW NW Section 14-25-8, was drilling below 580 feet.

J. K. Wilson and others drilled a failure in No. 1 McMahan, C NW NE SW Section 21-26-6, southeast of El Dorado. It was abandoned at 2,804 feet.

Joe Liggitt has started drilling No. 1 Figge, C SW SW NE Section 36-27-6. The Mid-Kansas Oil & Gas Co. was drilling at 375 feet in No. 1 Harris, C SW SE NE Section 22-27-7. Flack, Davidson and others were rigged up on No. 1-A Barnhill, C SE SE NW Section 23-27-7. Sheldon and others have a rig up for No. 1 Blunt, C NW NW NW Section 34-27-7.

In the Blankenship Field, Rogers and others were drilling at 1,291 feet in No. 7, CSL SW NW Section 29-26-8. John Rogers has commenced drilling No. 9 Dooley, SW cor. SE SE SE Section 29-26-8, and No. 10 Dooley, SE cor. SW SW SE Section 29, and has rigs up for No. 11 C NE NW SW and No. 12, C N half NW SW Section 29.

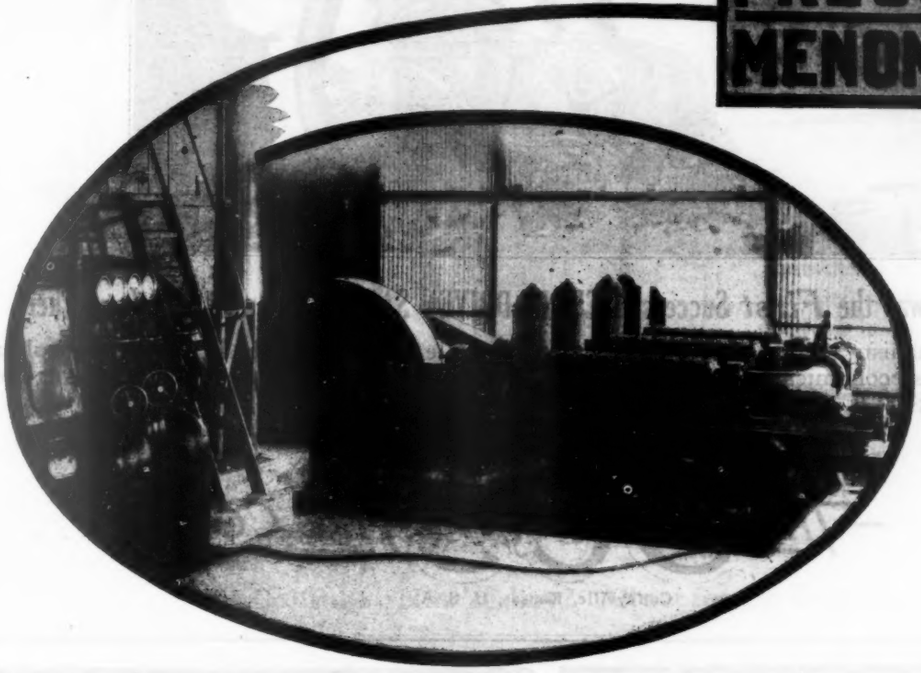
The Empire Gas & Fuel Co.'s No. 12, C NW NE NE Section 35-27-4, El Dorado district, was completed in sand at 2,055-70 feet and is pumping 25 bbls. a day of 39 gravity crude.

Cowley County

Lewis Oil Co. has completed No. 6, SW cor. SE Section 31-30-6, which is

25000 barrel pipe line pump
A compact unit for continuous service

PRESCOTT
MENOMINEE



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Single reduction drive through double helical gears of the herringbone type.
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Smooth, quiet operation and highest economy.

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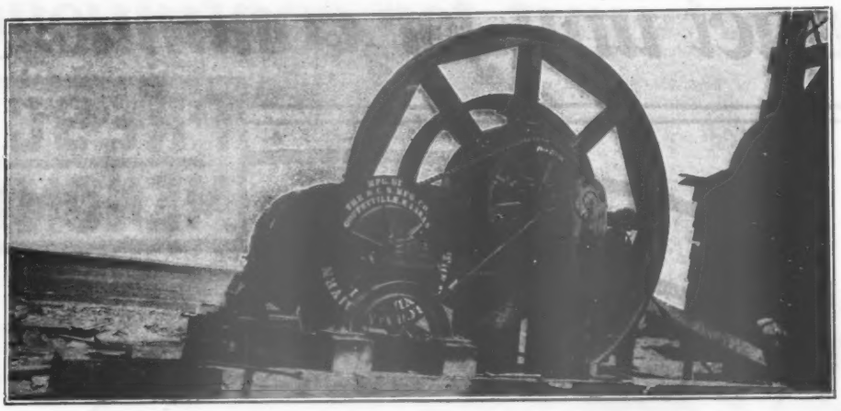
THE PIONEER



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is no other mechanism made that will consistently handle any size Bailer in any depth hole as easily, as fast, as economically, and with as little wear and tear and little fuel and power consumption as the S. & B. Chain Driven Sand Reel.

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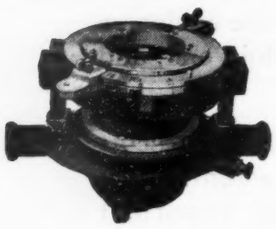

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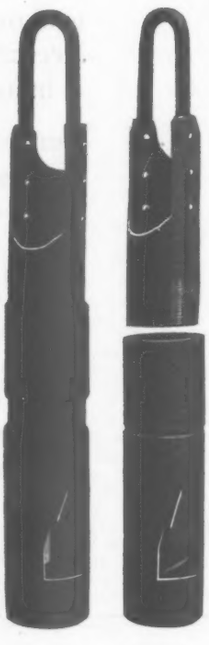

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This Exposition will witness a get-together of comrades of the Oil Fraternity such as has never before been seen. These nomads of the Industry, who have scattered to far corners of the globe, will stage a big celebration of their own.

"Hello, Bill! How'sa boy? All set for the Exposition?"

"No-o, Sam, can't make it. I've got a well going down out near Blinktown and I've gotta stay with it. Hate like the dickens to miss it, but — —"

"Listen, Bill, you're all wrong. What you'll lose by leaving that job a few days isn't in it with what you'll lose by staying away from the Exposition. There's always something new out there that'll put you wise."

"They tell me it's going to be some show this year — midway a quarter of a mile long, lots of rides and shows. Dunno but what I'll have to turn loose and go."

"Sure you will. You can't afford to miss it. You'll see all kinds of new equipment."

"Guess I'll have to go and be with the crowd. Well, so long, Old Man, I'll see you at the Show."

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Rust-resisting Copper Steel

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flowing 125 bbls. from sand 2,888-99 feet, and No. 7 Robbins, NW cor. SW NW Section 31-30-6, is spudded. Hershey and others are drilling at 1,480 feet in No. 1 Simons, NE cor. NE Section 33-30-7. Empire Gas & Fuel Co. has a dry hole at 3,370 feet in No. 3, NE cor. SW NE Section 13-31-7. Mid-Kansas Oil Co.'s No. 1, NE cor. SW NE Section 3-32-8, is dry and abandoned at a total depth of 3,131 feet. Phillips Petroleum Co.'s No. 1-A Shaver, CSL Lot 7, Section 6-33-8, is drilling at 539 feet. T. B. Slick and others have a rig up for No. 1-A Waite, NE cor. SW Section 19-32-3. The hole was lost at 2,614 feet in No. 1, same location.

Trees Oil Co. has spudded No. 2, SW cor. NW NE Section 28-31-4. C. B. Roth and others' No. 1, SE cor. SW SW Section 20-31-5, had sand at 1,705-08 feet and is shut down with 9,000,000 feet of gas. Wentz Oil Corp. has the rig up for No. 1, NW cor. NW Section 29-32-3.

In the Rainbow Bend pool, the owners, Waite Phillips Co.-Independent Oil & Gas Co.-Marland Oil Co., have the following operations: No. 2, NE cor. NE Section 19-33-3, had sand at 3,240-52 feet with 1,500 feet of oil in the hole. No. 6, NW cor. SW Section 21-33-3, had sand at 3,196-3,233 feet, and made 285 bbls. the first 8 hours. No. 3, SE cor. SW Section 21-33-3, had sand at 3,244-84 feet, and flowed 538 bbls. the first 12 hours. No. 5, NW cor. NE SW Section 21-33-3, is spudded. No. 3, NW cor. NE NW Section 28-33-3, had sand at 3,245-84 feet, and made 207 bbls. in 9 hours.

In the Winfield pool, the J. A. Hull Co.'s No. 13, SE cor. NE Section 24-32-4, is spudded, and No. 11, NE cor. SE Section 24-32-4, is also spudded. Mummert Drilling Co. has the rig up for No. 1, SE cor. NW Section 19-32-5.

OKLAHOMA

(Continued from Page 36)

at 2,576-86 feet and is showing 4 bailers of oil a day. It is not completed. Savoy Oil Co. has a dry hole at 3,240 feet in No. 1, NW cor. SW Section 23-17-8. Texas & Pacific Coal & Oil Co.'s No. 4, SE cor. NE SE Section 21-17-9, had sand at 2,461-80 feet and is showing for 15 bbls. after a shot of 20 quarts. Shaffer Oil Co. and others have completed No. 2, CSL SW SW NW Section 27-16-9. Sand was 3,360-88 feet and the well is making 10 bbls. after a shot of 15 quarts. C. G. Tibbens has a dry hole in No. 1, NE cor. SW SW Section 30-15-9. It is abandoned at 3,078 feet. Phillips Petroleum Co.'s No. 5, NW cor. SW NW Section 24-14-9, had sand at 3,039-75 feet and is flowing 50 bbls. a day. Central National Oil Co.'s No. 1 NE cor. SE Section 1-14-10, is dry and abandoned at 3,138 feet. Jomack Oil Co. has spudded No. 1 Long, SW cor. NW NW Section 5-14-10.

The Atlantic Oil Producing Co.'s No. 3, C NE SE Section 14-17-8, was shot with 100 quarts in sand at 2,285-2,317 feet and swabbed 17 bbls. a day after the shot. It was not completed. The Black Gold Oil Co.'s No. 1, SE cor NW NE Section 14-17-8, was abandoned as dry at 2,880 feet. The Tidal Oil Co. was drilling at 600 feet in No. 1, C NE SE NE Section 21-16-8.

Timbers on Ground

Mann & Bartlett have the timbers on the ground for No. 2, CWL SW NE Section 5-19-8. The Texas Co. is drilling at 300 feet in No. 1, NW cor. SW Section 5-19-8. A. D. Whitten and others' No. 1, SE cor. NW Section 5-19-8, had sand at 1,987-2,008 feet and was shot with 80 quarts. The hole filled up 250 feet with oil in 16 hours. It is not completed. Roxana Petroleum Corp.'s No. 1-A, NW cor. SW NE Section 18-19-8, is drilling at 1,000 feet. Holmes & Crawford have a dry hole in No. 2, NE cor. NW NE Section 22-19-10 at 2,727 feet. Burton & Holmes are drilling at 300 feet in No. 2, C SW NE Section 22-19-10.

Billingslea and others have 16,000,000 feet of gas in sand at 2,305-30 feet in No. 1, SW cor. NW Section 7-18-9. Mid-Continent Petroleum Corp. has a dry hole at 3,119 feet in No. 15, SW cor. NW SE Section 11-17-7. Atlantic Oil Producing Co.'s No. 3, C NE SE Section 14-17-8, had sand at 2,285-2,317 feet and is estimated at 10 bbls. after a shot of 100 quarts, and No. 4, NE cor. SE Section 14-17-8, is drilling at 700 feet. Waite Phillips Co. is drilling at 350 feet in No. 1, SW cor. NE SE Section 27-17-8. R. W. Yakish has a dry hole in No. 1, NW cor. NE NW Section 27-17-8, which is dry and abandoned at 3,102 feet. Josey Oil Co. has completed No. 3, NW cor. SW SE Section 36-17-9. Broken sand was found at 1,107-62 feet and the well was shot with 115 and with 7 quarts, and is pumping 6 bbls. Bell Oil Co. has a failure in No. 1 CSL SE NW NW Section 10-17-10, which is abandoned at 2,987 feet. J. H. Wright is building the rig for No. 1-A, NE cor. SE SW Section 23-17-10, and No. 8, SE cor. SW SW Section 24-17-10, is dry and abandoned at 2,436 feet.

Near Bristow, the Nowata Oil & Refining Co. has skidded the rig in No. 1, SW cor. SE NW Section 14-15-9. C. G. Tibbens is drilling at 200 feet in No. 16-A, SE cor. NW Section 30-15-9. Jomack Oil Co. has a machine in for No. 1, SW cor. NW NW Section 5-14-9. Phillips Petroleum Co.'s No. 4, NW cor. SE NW Section 24-14-8, is abandoned at 3,050 feet. Hall & Donnelly have a disappointment in No. 1, SW cor. SW Section 20-14-10. Sand was 2,830-31 feet and the showing was estimated at 100 bbls. It was shot with 40 quarts and has a hole full of water and very little oil. C. F. Noble has a dry hole at 3,400 feet in No. 4 NE cor. NW Section 20-14-10. H. F. Wilcox Oil & Co. has completed another well on the lease in the SE quarter of Section 20-14-10. It is No. 2, CNL NE SE of the section and sand was at 3,352-64 feet, and the well is good for 15 bbls. after a shot of 20 quarts.

Kay County

Mississippi Valley Oil Co. is rigging up No. 1, SW cor. SW Section 20-28-2w. Mid-Continent Petroleum Co.'s No. 1, SE cor. SW Section 16-29-1w, made 150 bbls. from a total depth of 2,100 feet. Comar Oil Co. is spudding a twin well, No. 3-A, SE cor. NE Section 21-29-1w. Day Oil Co.'s No. 1, SE cor. NW NW Section 3-28-1w, is spudded and shut down. Comar Oil Co. has abandoned the location for No. 2, SE cor. NW SW Section 5-28-1w. Prairie Oil & Gas Co. has completed a gas well in No. 3, SW cor. NW Section 10-27-1w. Sand was 3,421-32 feet and the well is shut in with 10,500,000 feet of gas. The Texas Co. has a rig in for No. 15, SE cor. NW SW Section 27-25-1w. Marland Oil Co.'s No. 6-A, SE cor. NE NE Section 33-25-1w, had sand at 4,240-54 feet with some gas and it made a small flow. At present it has a fishing job. Marland Oil Co.'s No. 7-A, NE cor. NE Section 33-25-1w, had sand at 4,230-60 feet and made 65 bbls. an hour. T. B. Slick is spudding No. 7½ C S half SE SW Section 35-25-1w.

Simms Oil Co.'s No. 1, NE cor. SW Section 32-28-1w, had the top of the lime 3,400 feet with a show of oil. It made one flow and is drilling in lime at 3,412 feet, and is not completed. Poling & Denby's No. 2, C SE NW Section 9-27-1w, is completed for 50,000,000 feet of gas found at 3,455-71 feet.

The Mid-Continent Petroleum Corp.'s No. 1 School land, C SE SE SW Section 16-29-1w, is a 15-bbl. pumper in sand at 2,065-74 and 2,094-2,100 feet. The Comar Oil Co.'s No. 5 Priboth, C NW NW NE Section 21-29-1w, is pumping 81 bbls. a day from sand at 2,045-50 feet. It had a gas sand at 2,074-90 feet, total depth. The White Eagle Oil & Refining Co.'s No. 1 Campbell, SW cor. SE SW SW Section 32-29-1w, was abandoned as dry at 2,522 feet.

The Mississippi Valley Oil Co.'s No. 1, SW cor. Section 20-28-2w, was drilling below 150 feet. Reiter & Foster abandoned a test at 1,960 feet, C SW SW SW Section 5-28-1w.

Drilling Deeper

The Marland Refining Co.'s No. 1 Staher, C SE SE SW Section 1-26-2w,

an old well drilling deeper, was underreaming at 2,524 feet.

The Prairie Oil & Gas Co. is deepening two wells on the Vanetta farm, No. 3, C NW NE SE Section 1-26-2w, drilling at 2,615 feet and No. 5, C NE NE SE Section 1, drilling at 2,640 feet. The Marland Refining Co. was pulling 9 inch pipe to re-run in No. 4 Hubbard, C SE NE NW Section 12-26-2w.

The Blackwell Oil & Gas Co.'s No. 2-A, Land, NE cor. Section 22-27-3w, was abandoned at 3,040 feet. The rig was skidded and a twin well will be drilled.

The Twin States Oil Co.'s No. 1, Thomas, C NW NW NW Section 22-25-2w, which was drilled to 2,061 feet, will be deepened and the 8-inch pipe was being pulled. The Texas Co. has commenced drilling No. 14 Gilbert, C NE SW SW Section 27-25-1w, and No. 15 Gilbert, C SE SW SW, same section.

The Wentz Oil Corp.'s No. 6, Mahoney, SW cor. SE SE Section 28-25-1w, was completed in sand at 4,240-62 feet. It started the first day at 58 bbls. an hour and increased to 78 bbls. an hour. It made 1,829 bbls. the first 24 hours. No. 5 on the same lease, C NE NE SE Section 28, made 592 bbls. the first 24 hours from sand at 4,255-67 feet. A rotary was being rigged up for No. 7, C NW SE SE Section 28. The Marland Refining Co. & Mid-Continent Petroleum Corp.'s No. 6-A Woods, C SE NE NE Section 33-25-1w, which started naturally at 400 bbls. from sand at 4,240-76 feet, was given a 20-quart shot and the production increased to 2,526 bbls. the ensuing 24 hours.

Wentz Oil Corp.'s No. 1, SW cor. SW Section 16-29-1, had sand at 2,034-36 feet with 2,500,000 feet of gas and is not completed. A. D. Martin and others are drilling at 800 feet in No. 1, C NE Section 21-28-4. McIntyre & Foster are drilling at 200 feet in No. 1, SE cor. NE Section 29-27-1. Twin State Oil Co.'s No. 1, SE cor. NE NW Section 31-27-2, is drilling at 1,250 feet.

On the eastern edge of Kay County, C. D. Noble has abandoned the location for No. 1, SW cor. SW Section 16-29-5. William Broadhurst and others have made a location for No. 1, SW cor. NW Section 29-27-2.

Pawnee County

Magnolia Petroleum Co.'s No. 3-A NW cor. SW Section 4-22-3, a twin well, is completed. Sand was 4,115-46 feet, and the well is making 235 bbls. after a shot of 30 quarts. Frank Billingslea and others are drilling at 500 feet in No. 1, NW cor. NE Section 11-21-5.

Near Cleveland, Pete Adamson and others have completed another well, No. 1, SE cor. SW SW Section 32-21-8. The sand was 2,922-35 feet and the well is making 200 bbls. naturally.

Noble Oil & Gas Co. has a dry hole at 3,467 feet in No. 1, SW cor. NW Section 26-23-5. C. J. Wrightsman's deep test, SE cor. Section 24-22-4, was abandoned at 3,800 feet.

Payne County

Josey Oil Co. has spudded No. 9 Lee, CSL SE SE Section 35-19-5. Shaffer Oil & Refining Co. has 5,000,000 feet of gas in sand topped at 3,035 feet in No. 1, NE cor. NW SE Section 23-18-3, and No. 1, NE cor. SW Section 23-18-3, is drilling at 3,780 feet in sand topped at 3,737 feet. The well is making 26 bbls. of oil and 4,000,000 feet of gas. Mulberry Oil Co. is drilling at 750 feet in No. 2, SE cor. SE Section 31-18-4.

Jefferson County

Prairie Oil & Gas Co. has completed a shallow well in No. 5 CNL NW SW Section 34-6s-5w. Sand was 1,217-31 feet and the well is making 70 bbls. of oil and 40 bbls. of water.

The Humble Oil Co. & Hambro have completed No. 2, CSL NW Section 34-6s-5w. Sand was 1,218-32 feet and the well is pumping 115 bbls.

Carter County

In the Brock Pool, the Amerada Petroleum Corp. has a machine in for No. 17, C NE NW Section 28-5s-1, and No. 9, CSL NE NW SE Section 28-5s1, had sand at 1,149-59 feet and is making 100 bbls. on the pump. No. 2, CEL NW SE Section 34-5s-1, had a total depth of 1,126 feet and was plugged back to a sand 1,051-61 feet and is making 14 bbls.

Baker & Strawn have the rig up for No. 6, CNL NE NW Section 22-4s2w.

Stephens County

Owl Oil Co.'s No. 1, NW cor. NE Section 28-1s-8w, has 500 feet of oil in the hole from sand 1,833-40 feet. Magnolia Petroleum Co. has completed No. 10, NE cor. SW NW Section 20-1s-8w, for 3 bbls of oil and 4,000,000 feet of gas from sand at 2,265-81 feet. Crump & Beard's No. 3-A, SE cor. NE SW Section 32-1s-8w, had the sand at 2,016-19 feet and is making 50 bbls. of oil and 15 bbls. of water. Lorraine Petroleum Co. is pumping 10 bbls. of oil from sand at 2,200 feet in No. 1-A, CSL SE SE SE Section 32-1s-8w. Branson and others have spudded No. 2, SW cor. NW Section 35-1s8w.

Cotton County

P. & D. Drilling Co. has a dry hole at 2,200 feet in No. 1-A, CSL SE SE SE Section 23-1s-10w.

Comanche County

Becker & Reed's No. 1, C SE SW Section 3-3-10w, had sand at 1,080-91 feet with 450 feet of oil in the hole. It is being bailed after the hole caved 40 feet, and is not completed. Max Westheimer is drilling at 200 feet in No. 1, NE cor. NW SE Section 30-2-9w. Eagle Creek Oil Co.'s No. 6, NW cor. SW NE Section 26-1-9w, is drilling at 1,020 feet. Brewer, Stacey and others have spudded No. 1, NW cor. SW NE Section 27-2-10-w.

Grady County

Kipp and others have set the surface casing in No. 2 C SE NW Section 35-5-8w. Magnolia Petroleum Co.'s No. 4, McCoughtrey, SW cor. NW NE Section 35-5-8w, is spudded. Clark, Cowden and others have a duster in No. 1, NE cor. SE Section 14-5-7w, which is abandoned at 2,815 feet. Carter & Knox No. 1, SW cor. SE SW Section 35-3-5w, is completed. Sand was 1,485-89 feet and the well is flowing 60 bbls. through the tubing.

Noble County

Red Bank Oil Co. is drilling at 960 feet in No. 1-A, SE cor. SW SW Section 16-21-2w. Magnolia Petroleum Co. is rigged up in No. 1 Reynolds, NE cor. NW NW Section 21-21-2w, and is fishing for a bit at 1,028 feet in No. 1, NW cor. NE Section 22-21-2w.

Marshall County

United Eight Oil Co. is shut down at 802 feet in No. 2, SW cor. SW Section 19-5s-6.

Pontotoc County

The Texas & Pacific Coil & Oil Co. a dry hole in No. 2, NW cor. NW Section 34-5-6, which is abandoned at 1,845 feet.

Garvin County

The Texas & Pacific Coal & Oil Co. has spudded No. 1, NE cor. SW Section 35-3-2.

SOUTHWEST TEXAS FIELDS

(Continued from Page 42)

& Gillam's No. 1 Peeler in the southern edge of the county has been abandoned at 1,680 feet, having trouble with salt water.

Bastrop County

Cardinal Oil Co.'s No. 1 Ott, at String Prairie, in southeastern Bastrop County, at 4,165 feet has a little gas and oil. Bastrop County, a few weeks ago the most active wildcat county in this part of the State, is now one of the least active.

Bee County

W. G. French in No. 1 Lucas got only a small amount of gas at 3,000 feet and is continuing to drill. W. G. Clark has abandoned No. 1 Scott, north of Beeville, in Bee County, at 3,275 feet. It had a little gas at 3,219 feet, but not enough for a well. Ross & Frederick in No. 1 Welder, 3 miles east of Beeville, at 2,585 feet (corrected depth) has considerable gas and the manager believes he can make a well. The well shut down recently due to dispute over leases, but has resumed.

Bexar County

Smith and Noakes' No. 1 Dietz, in eastern Bexar County, have the derrick up. The Plateau Oil Co. and The Texas

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LEASES—PRODUCTION

FOR LEASE for oil—160 acres, adjoining a drilling well, close to production, also royalties for sale. Will sell cheap. W. H. Freeman, R. F. D. No. 1, Hamilton, Kans.

11,000 ACRES southeast McMullen County, Texas, 5-year paid-up commercial lease, $3.00 per acre. On splendid structure. Pipe line now being laid to supply natural gas to San Antonio will pass over or near this acreage. Most of surrounding territory controlled by major companies. Those familiar with trend of development will appreciate this. Prompt action necessary. J. H. Means, Hicks Building, San Antonio, Tex.

FOR SALE—Oil leases, well located, West Texas. Two drilling blocks, 8,500 acres each. Choice river ranches for sale. Box 244, San Angelo, Tex.

LEASED BLOCK—30,000 acres; Furnas County, Nebraska; oil and gas; strongly approved by Geologists Edward A. Hill and Geo. H. Hook; drilling wanted. Beaver Valley Oil Co., Beaver City, Nebr.

LEASE DEALERS ATTENTION

I am asking price of $5 and $10 per acre, subject to advance, on leases around a deep test I am drilling in Western Kansas, not far from test. Have had two good showings already, and this test is financed to go 4,000 feet, unless oil or gas is found at a lesser depth. Leases are in 40-acre blocks or more. Address P. O. Box 876, Kansas City, Mo.

3,000 ACRES, 20-year leases, Morgan County, Colorado, for well to be commenced soon, also other drilling propositions. Wire or write, E. Fackler, Manchester, Kans.

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Can furnish practically proven leases in Artesia Field, Eddy County. Also other tracts in Eddy, Chaves and Lea Counties. Particulars on request.

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Around a test now drilling in Western Kansas and is financed to go 4,000 feet unless oil or gas is found at a lesser depth. Have had two good showings. Leases of 40 acres or more and not far from test. I must have quick action and am asking bargain prices on leases, subject to advance. Address P. O. Box 876, Kansas City, Mo.

FOR SALE

My half, or 20 acres, of 80-acre tract in Okmulgee district, Section 32-16-12e. None but attractive offers considered. Florena Gabe, 5132 Wabash Ave., Apt. A, Chicago, Ill.

LAND AND DEVELOPMENT company, incorporated, owns several hundred acres in fee joining and near large producing oil wells, Arkansas and Oklahoma; will sell one-third or one-half interest at bargains for operating capital. A-1 proposition. Box A-942, The Oil and Gas Journal, Tulsa, Okla.

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LEASES—PRODUCTION

FOR PANHANDLE oil leases and drilling contracts, write Dr. W. R. German, Canadian, Texas.

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30,000 acres land, 92 per cent oil, mineral, two large structures, nearby producing wells, two large companies drilling 2,000 to 3,300 feet. Some bargain. $1.50 cash acre, one year; long time balance. Hundreds acres irrigated; adjoining county seat, Montana. Furnish geological report. Write, wire, today. R. R. Forward. Duluth, Minn.

FOR SALE — Proven gas acreage in Lincoln, Putnam and Cabell Counties, West Virginia. Foote Oil & Gas Co., Inc., Cuba, N. Y.

WILDCAT

We have a large tract of land in Cherokee County, Texas, that has been passed upon by a prominent geologist as being a first-class prospect for oil. We will give reasonable amount of acreage for a test well. If interested, write and we will give you details. P. O. Box 67, Jacksonville, Tex.

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Marathon Fold—West Texas

12,000 acres University Permits, Pecos County, dated October 1, 1924, 5 years. The new law makes these permits most attractive. Can be subdivided into 40-acre tracts. Near Sun, Gulf, Dixie, California Company, Phillips, Arkansas Fuel, Humble holdings.

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2,000 acres, Irion County, 10-year lease; watch the new work here.

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Write for prices and maps. Will allow time for geological inspection.

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Farms—Ranches—Oil Leases—Royalties.
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Wonderful oil leases in New Mexico in Torrance, Lea, Valencia, Lincoln, 50 cents to $2.50 per acre; also maps showing wells, locations, drilling, $1 each. Kingsley, 508 Stanford Ave., Los Angeles, Calif.

CAN FURNISH leases for drilling in Moran shallow field; also have production and leases for sale at attractive prices. Write Box 124. Cisco, Tex.

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DRILLING PROPOSITIONS and production in the shallow fields of Allen and Warren Counties. R. E. Cope, Box 489. Bowling Green, Ky.

PROMOTERS and bargain hunters read this—two 160-acre equipped leases in shallow field of Kansas. Greatest bargain in Mid-Continent Field; sacrificed on account of illness; easy terms. Write Dr. S., 210 West 11 St., Kansas City, Mo.

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SOUTH TEXAS oil leases and drilling contracts on good structure. Write us for full particulars and tell us your wants. Gulf Leasing Co., 525 Brady Bldg., O. C. McLeod, Mgr., San Antonio, Tex.

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FOR QUICK ACTION will lease whole or part of 140 acres near Weleetka, Okfuskee County, Oklahoma; surrounded by some of the best oil structures in the State. Dr. E. J. Angle, 407 Funke Building, Lincoln, Nebr.

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ROYALTIES—PRODUCTION

GULF COAST ROYALTIES

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1/64th perpetual mineral interest under 427.25 acres, Erwin Survey.

1/96th perpetual mineral interest under 110 acres, Erwin Survey.

1/64th perpetual mineral interest under 320 acres, Anderson Survey.

Formation tests have been drilled and deep well to be drilled at once by Texas Co. on property.

JEFFERSON COUNTY

1/96th over-riding royalty under 10,267.49 acres vicinity McFarland League solidly blocked by Texas Company, Humble, Gulf and Sun Companies.

Formation tests drilled and deep well to be drilled on this block by Texas Co. beginning October 1st.

GALVESTON COUNTY

1/96th over-riding royalty under 10,190.85 acres.

This land under lease to Texas Co., Gulf and Humble Co., and formation tests and geophysical methods to be applied.

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GRADUATE mechanical engineer, age 32, commercial and executive as well as engineering experience, would like to form connection with some branch of oil industry. Would like position with concern offering opportunities for advancement or would consider buying active interest in established business such as gasoline extraction or carbon black manufacture or other business of forming connection with well qualified persons to undertake a business of such nature. References exchanged. Box A-920, The Oil and Gas Journal, Tulsa, Okla.

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OIL ACCOUNTANT secretary desires connection with progressive company or individual. Seven years' experience secretary and auditor of company; thoroughly familiar all phases of the business. High-class young man; well educated; hard worker. Best of references. Box A-943, The Oil and Gas Journal, Tulsa, Okla.

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WANTED — Drilling 2,500-foot well. Write me for terms and description of 2,500-acre block, eastern central Jones County, Texas, between Hawley and Nugent; 25 miles west and south from Albany, Shackelford County. Square and liberal deal to the right party. First-class shallow oil indications. Write me at once. J. C. Hunt, 980 Pecan St., Abilene, Tex.

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WANTED to know the address of Bob Sisk, last heard of west of Tampico, Mexico. Please write A. P. Gilliland, R. R. 1, Boonsville, Tex.

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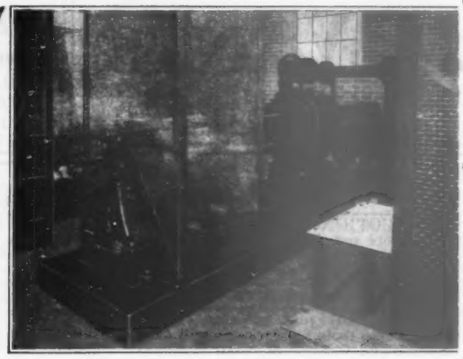

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Co. have started drilling the joint test on the Walsh tract, about 3 miles east of the nearest production in the Somerset shallow field. It will be a deep test to the Edwards Lime. Marland Oil Co. has not concluded its core drilling on its block in eastern Bexar County. A rig is being moved in at Elmendorff for another test on the block of leases held by E. S. Bridge and on which he has drilled two holes, one of which got a shallow showing. A third test will be started in a few days. Derrick is up on the Vick tract several miles west of Elmendorff for an Edwards lime test that California interests are preparing to make. Andrews & Kerr have completed the third 640-foot well on the Janszen tract, just north of Southton, in the southern part of Bexar County, where they are opening an extension to the shallow pool started by the U. S. Tex (now the Texas Unity Oil Co.). The wells make about 5 bbls. each and occasionally up as high as 20 bbls. The oil is transported by truck to the Grayburg refinery in San Antonio. The wells are on the east side of the San Antonio River, while on the west side of the river the Rentex Oil Co., on the Yturri tract, has developed shallow production that for the months of April, May and June, 1925, amounted to 5,550 bbls. valued at $9.990.

Lockhart County

Production reached its peak in the Lockhart Field about two months ago, the biggest production of any one day being at 14.384 bbls. Since then there has been a little decline in the production. Orders were issued recently to discontinue swabbing but at that time few if any wells were being swabbed except for the first few hours, which is always permitted. Production is continuing steady at around 12,000 bbls. daily or less, and, barring any unusually large wells and new and large producing extensions, the field will probably not show any increase of importance and will likely decrease in production slowly.

Gulf Production Co. got better than a 100-bbl. well in its No. 4 Riddle, which is on the south edge of the field. No. 5 Riddle is being cemented and No. 6 and 7 are drilling. No. 5 topped the Serpentine at about 1,354 feet. All the wells on the Riddle lease are along the north edge of the lease.

Witherspoon has completed and put on the pump all the outside locations on the 52½-acre A. H. Cardwell lease and will not drill the inside locations at this time. He is completing No. 11 Brewer on the 36-acre tract purchased from Mills Bennett, which will complete the drilling of that lease.

Armstrong and others' No. 1 Thomas, east of Lockhart city and about midway between the city and field, at around 1,500 feet bailed but failed to make a well at that depth. It drilled deeper. Two additional wells are to be drilled by other interests in that part of the county, the deals being worked up at this time.

DeWitt County

Yoro Development Co.'s No. 1 Burns, at Edgar, in DeWitt County, shut down for drill stem, has received 600 feet of new drill stem and is now drilling at 800 feet. Cuero Oil & Gas Co.'s No. 1 Holzappel, southwest of Cuero, drilling at 1,875 feet.

Frio County

Lefevre & Story's No. 1 Blackaller, in Frio County, has been abandoned at 3,005 feet in the Buda lime, the contract having been filled at 3,000 feet and the log of the well not seeming to advise deeper drilling. The rig has been torn down.

Goliad County

Houston Oil Co.'s No. 1 Dick Woods has been abandoned at 3,200 feet. It was about 15 miles north and west of the Refugio gas field and was an effort to locate another gas field. It is not understood the company will continue to drill in that territory.

Guadalupe County

Weinert and other's No. 1 fee on the Weinert ranch, in the southern part of Guadalupe County, is setting casing at 700 feet and expecting to pick up a shallow oil sand at around 800 to 900 feet. This will be the third test on that tract, one having been made by Grayburg Oil Co. and one by Flick & Breen.

The most important test at this time in Guadalupe County is the Magnolia Oil Co.'s No. 1 Day, south of Luling a few miles, which is setting casing at a little below 2,000 feet to make a test in the Taylor Marl horizon. The test will be made early this week.

Roxana Petroleum Corp. has the derrick up on the Hageman farm in the John Tom survey, 3 miles southwest of Kingsbury in Guadalupe County, for a test with the view to locating another Serpentine bed similar to the Lockhart Field. Scrivner and others are tearing down the rig on No. 1 Vetter, west of Kingsbury and northeast of Seguin, and are moving to a location about 1½ miles northeast.

Kendall County

J. N. Allen's No. 1 Otto Rahm is setting casing at 600 feet to cut off water.

Kinney County

Havelin Oil Co., in Kinney County, is drilling at 3,870 feet, where it is said to have found a tight oil sand. The well has been drilling for a long time and for the last two months has been fishing, but succeeded in pushing the lost tools to one side and is now 100 feet below them.

Live Oak County

Texas Pacific Coal & Oil Co. is arranging to drill another test for gas in southern Live Oak County on the D. B. Miller tract. Alexander and others have started to drill No. 1 Tom Sexton, in Live Oak County, in the Gussettville neighborhood, 6 miles from George West.

Medina County

Maxwell & Turman are moving in on No. 1 Tom Neumann, on survey 41, 4 miles southeast of Dunlay. Ina Oil Co., which tested at 1,842 feet in what was supposed to be Edwards lime, is drilling deeper and is in the Edwards at about 1,875 feet. Test is the No. 1 Blackburn and is 1½ miles northeast of the Ina Field. Johnson Brothers' No. 1 Tschirhart, less than 1 mile west of Noonan, is drilling at 1.452 feet.

San Patricio County

John Sigmund's No. 6 well at Aransas Pass, in San Patricio County, missed the sand found in No. 5 at above 2,200 feet. Drilling is continuing.

Starr County

Dauchy & Bryant DeGraffe-Kelsey's No. 1, Starr County, is setting up on survey 125, 2,490 feet east of the west line and 150 feet south of the north line.

Travis County

Plateau Oil Co. abandoned No. 1 Walling at Littig, in Travis County, and in conjunction with Dixie Oil Co. is starting a test at Creedmoor, 12 miles south of Austin. This is one of several tests the Plateau company started along the Travis-Bastrop County line in an effort to find a Serpentine bed or drill to the Edwards lime. The Littig test was abandoned at 1,800 feet when 198 feet into the Edwards. It topped the Austin chalk at 1,209 feet and went out of it at 1,502 feet. There was no Serpentine.

Somerset Production

Pipe line runs of the Somerset Field for the month of August, 1925, were 74,862 bbls., or an average of 2,415 bbls. per day. For July the runs were 78,226 bbls., or 2,523 bbls. per day. There was a decline of almost 100 bbls. a day in May over April. July production was almost level with May and June. August drops another 100 bbls. per day. All the production of Somerset is refined locally in the refineries of the Pioneer Oil & Refining Co., Grayburg Oil Co. and Southern Refinery.

Calliham Field

Total pipe line runs from the Calliham Field in McMullen County for the month of August were 8,014 bbls., or 258 bbls. per day average, against 10,300 bbls. pipe line run and 332 daily average for July. Part of the July pipe line run was storage. There is very little new drilling in the field and the pipe line runs would indicate the production is nearly constant. Daily average pipe line runs in April was 262 per day, May 300, June 233, July 332, August 258.

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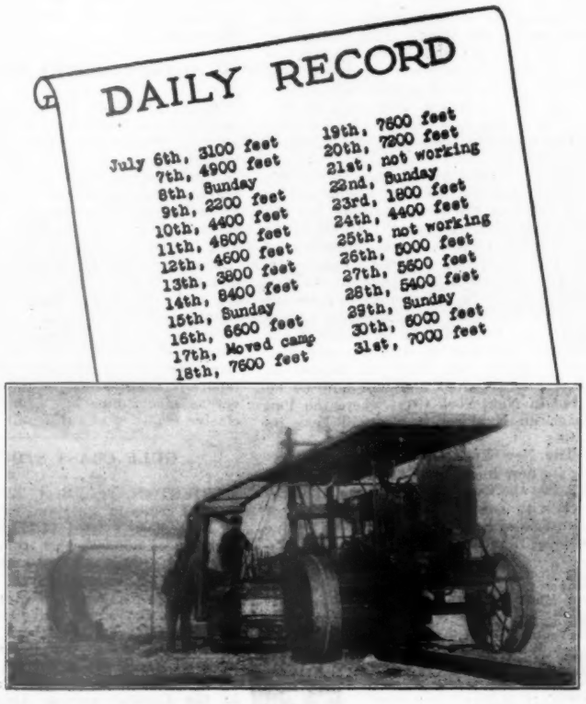
A Mile a Day for 19 Days



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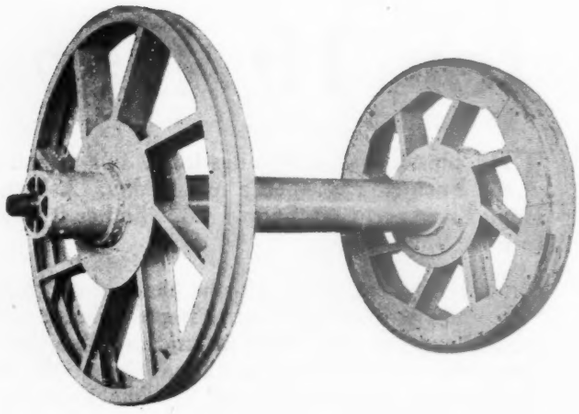

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TULSA OKLAHOMA

ROCKY MOUNTAIN AREA

(Continued from Page 48)

insufficient to warrant the expense of wells were, for the most part, small ones, laying a 40 or 50-mile pipe line to carry the oil to the railroad. However, if the La Barge wells hold up to the present production, and if the field yields more producers of the same caliber, there is no doubt the crude will be afforded an outlet.

Montana Operations

The Devereaux Oil Co. has started a test well west of the Cat Creek Field in Montana, and not far from the Musselshell Valley well, which started a great excitement last winter by striking an oil pocket. The Musselshell well failed to develop commercial production, but the Devereaux well is said to be more favorably located on the structure.

The Kevin-Sunburst Field reports its 370th producing well. Six producing wells and two dusters were reported during the week, the Rose Oil Co.'s No. 7 Byrne being the best well of the week. This well came in with an initial production of 1,400 bbls. The Ohio Oil Co. completed two small wells, one on the Reeg lease and one on the Barr tract. These will average 50 bbls. daily to the well. The Wyomont Oil Co. brought in a small producer, and the Ferdig interests completed a producing well and a duster on the Lashbaugh lease. O'Neill Brothers report a 5,000,000-foot gas well on the Coonrad lease in the Kevin Field.

The Record Petroleum Co. completed its No. 1 in the Lake Basin district, and has a gas well with an estimated flow of 25,000,000 feet.

The Gypsy Oil Co. is reported to have completed a large gas well on the west slope, near Loma, Colo. No official reports have been received, but rumor places the production at 70,000,000 feet.

Midwest Men Transferred

Colonel R. W. Stewart, chairman of the board of the Standard of Indiana, has shown his appreciation of the worth of the men in the Midwest Refining Co. by taking many of the men of the old Midwest organization for the new company, the Pan American Exploration Co.

The geological department of the Pan American will be headed by Carroll G. Wegeman. Mr. Wegeman was the first geologist to make a survey of Salt Creek Field that was worth while, and he did this in the service of the United States Geological Survey, giving to the public a clear and concise report of the conditions of that field long before it was recognized as a great factor in the oil business in the West. This bulletin of the Survey still stands as the best authority on Salt Creek Field, though it was written before the field had been drilled, except in the center, and when no one but the geologists and a few keen-sighted business men had any idea of the size of the field.

E. L. Estabrook, former petroleum engineer for the Midwest Refining Co., will serve in the same capacity for the Pan American. James W. Stewart, son of Colonel Stewart, is the president of the Pan American, and the younger Mr. Stewart has risen from an ordinary field worker in the Midwest ranks to assistant to Vice President Bretchsneider, of the Midwest. Ellis Hall, a geologist of the Midwest, will also go with the new company. These men were all located at Denver and Casper and will now be located in New York City, where the Pan American Exploration Co. will have its offices.

The New York Oil Co. will start laying its new line from Casper to Glenrock to serve the Continental refinery at Glenrock with gas for fuel and the town of Glenrock with domestic service. The line will be 12-inch.

Runs for the Week

Salt Creek	67,480
Teapot	1,660
Big Muddy	3,010
Grass Creek	3,990
Elk Basin	1,010
Greybull	30
Rock River	2,940
Notches	180
Lance Creek	620
Poison Spider	890
Osage	340
Hamilton Dome	630
Mule Creek	700
Lander	300
Byron	50
Pilot Butte	300
Lost Soldier	5,980
Ferris	110
Cat Creek	3,100
Sunburst	11,750
Florence	260
Moffat	2,210
Fort Collins	1,280
Boulder	25
Tow Creek	120
Rangeley	100
Rattlesnake	410
Hogback	550
Artesia	2,900
Total	112,925

PRICES ADVANCE IN OKLA. MOTOR FUEL

(Continued from Page 20)

grade below 5¼ cents although some sales were made at 5⅛ cents. Quotations on the 42-44 water white were more or less nominal as none of that product seemed available. An idea of the market was given at 5½ cents. Kerosene prices now are higher than at any other time this year.

Distillates were comparatively inactive the past week but all prices remained firm. Market observers point out that distillate prices are not likely to slip at this time although little of the product is moving. Refiners still are reported making plenty of the product but are storing it in preparation for later seasonal demand. According to refiners another two or three weeks will see another wave of distillate buying.

Fuel Oil and Gas Oil

Both fuel oils and gas oils were inclined to sluggishness the past week with little trading of importance reported. It is admitted that fuel oil stocks in Oklahoma are fairly large at this time and that the present steady prices are due more to the coal strike and anticipated winter requirements rather than to actual spot demand. With prices unchanged, the lower gravities could be obtained from $1.02½ to $1.05; the 22-26 grade at $1.05½ to $1.07½; the 24-26 grade at $1.05 to $1.10, and 28-30 at $1.15. Good gas oil was available at 3⅛ to 3¼ cents.

Lubricants and Wax

Lubricants the past week were the only spot in the entire refined market which inclined toward softness but the prices on these oils remained fairly steady. With summer over and fall and winter coming on with a consequent let-up in motoring, demand for lubricants necessarily slackens. This accounts for the present comparative inactivity. Wax prices, based mostly on contracts, were unchanged the past week, ranging from 5⅛ to 5¼.

ALASKA SURVEY REPORT

WASHINGTON, D. C., Sept. 21.—Official advices have been received at the Interior Department from Gerald FitzGerald, the leader of the geological survey party which made geologic and topographic surveys in the Naval Oil Reserve No. 4 during the past spring and summer in Arctic Alaska. The geologist in the party is Walter R. Smith.

The party mapped 6,500 square miles and reports a large area of upper Triassic rocks north of the range, but no country favorable for the occurrence of oil south of the Colville River. Low anticlines were discovered north of that river, but no oil seepages found. This report is regarded at the Geological Survey as encouraging but affording no conclusive evidence of future oil discoveries.

GULF COAST STOCKS

HOUSTON, Tex., Sept. 22.—Stocks of Coastal crude in steel and earthen tanks on September 1 total 14,471,800 bbls., a decrease of 256,600 bbls. compared with August 1. Of the gross amount 6,644,325 bbls. are in steel tanks and 7,827,475 bbls. in earthen reservoirs. It is the first time the stocks have decreased in months. In addition there are some 7,973,300 bbls. of light gravity crudes in steel tanks at refineries and tank farms. The light gravity crudes stored in the Coastal section August 1 was 7,300,700 bbls.

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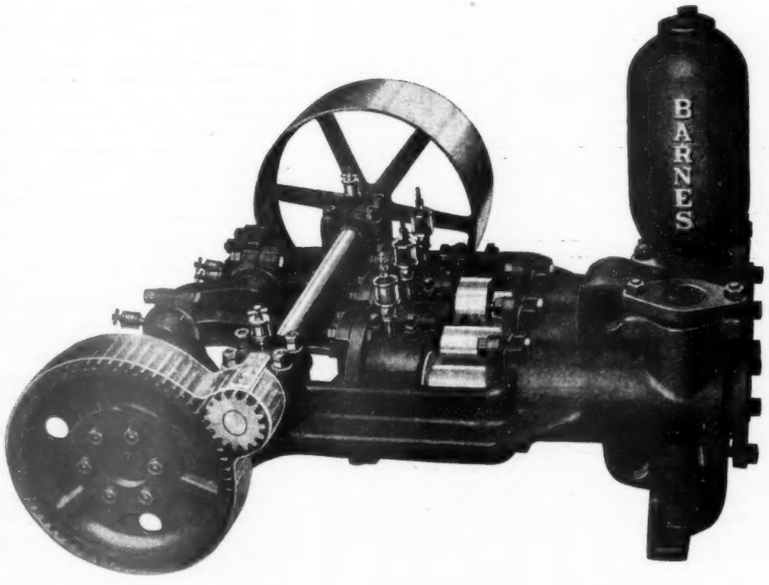

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Petroleum Securities Following Prices

Passing of Prairie Dividend Shows Wall Street Actual Condition in Oil Industry. South America's Importance

By N. O. Fanning
Room 543, No. 30 Church St., New York.

NEW YORK, Sept. 21.—Passing of the dividend by Prairie Oil & Gas Co. has sobered Wall Street, which had believed the oil business really prospering despite recent declines in crude and refined oil prices.

Wall Street has been basing its chief hope for a general advance in oil securities largely upon the fact that securities of almost all other big industrial and public utility concerns had been advancing to new high record levels. They based their belief upon the remarkable increase in consumption of petroleum products, and upon the favorable earnings reports for the first six months of 1925, issued by the principal oil companies.

It is an economic rule, however, that securities in general follow the course of prices. Not always concurrently, but nevertheless at about the same time. Inasmuch as oil prices have been declining it is not necessary to ask further why oil stocks have declined, instead of advancing, despite the action of other securities.

Hopes for advances in oil securities seem to rest on a similar movement on the part of either crude oil or refined products. The latter depends on the relation between supply and demand.

With a record demand for gasoline this summer, the oil industry withdrew little from storage of that product, and taking the country as a whole, added to crude oil stocks. Hopes for the commencement of withdrawals from storage depend upon a big increase in consumption during the winter or a considerable decrease in production of crude petroleum.

Course of Securities

As a rule oil securities move rapidly over a short period, instead of creeping up or down gradually. The chief cause of this is that the dividend yields are usually small, and spectators await the proximity of an increase or decrease in the dividend rates before buying or selling. Investment buying in oil securities is confined for the most part to those willing to hold on for a number of years.

Standard Oil Co. of New Jersey common stock at $40 per share yields 2½ per cent on the present dividend basis. Only those who bought the stock years ago can get a comparatively good return on this basis. Taking into account the stock dividend and split-up, the old stock is now selling at $800 per share, based on $40 for the present stock. In 1919 the old stock averaged about $730 per share. A buyer at this price would still be getting a yield of only about 2.77 per cent on his investment, but if he sold at $40 he would have a gain in principal of $3.50 per share, or about 10 per cent on the investment. Such an enchancement over a period of six years is not a savory dish for speculators. The investor fares much better, but still must hold on longer, presumably, for a very high return on his principal.

Although Standard Oil stocks are noted for selling at low yields, stocks of independent oil companies are similarly placed, when comparison is made with stocks of steel or other concerns.

The factor back of all this is the fluctuations in profits in the oil business. Usually the oil business has two highly profitable years out of ten. Profits in the two years must offset low profits or losses in the other eight.

Oil securities, as a rule, sell at prices anticipating the big year which is expected, or else at prices anticipating several years of depression. The move from the low to the high level of hope, as a rule, is abrupt and comes without much warning.

South American Oils

Developments in South America are going forward rapidly and it is believed in many quarters stocks of companies having valuable holdings in such countries as Colombia and Venezuela will be in the limelight when the oil business becomes prosperous once more. There are very few companies among those listed on the New York Stock Exchange that have holdings in South America. Many of the South American oil securities are traded in on the Curb Market.

Large American refining companies have recently taken interest in South American properties, including Gulf Oil and Standard of California. Practically all of the large American companies having refineries on the seaboard are interested financially in the development of South American properties having production prospects.

There is little use denying that these companies are looking to South America as a potential supplier of crude oil for their domestic refineries. For that reason, companies which may be able to supply this crude should benefit when the time comes.

Because of the remoteness of South America it is particularly difficult to follow operations of the oil companies on that continent. This fact doubtless adds to the speculative flavor of stocks of these companies.

Lago Petroleum

A London dispatch states that Sir James Currie, president of the Lago Petroleum Co., says British Equatorial Oil Co. is exercising an option to purchase 200,000 more shares of Lago, and estimates another 600,000 to 800,000 shares are held by private investors here. He says Blair & Co., of New York, will take 250,000 new Lago shares at $10 and will probably exercise option to take 450,000 shares more at around $12. The present Lago stock is to be exchanged on the basis of two shares for one of the new Lago company. Sir James Currie believes the company will be able to double its output before the end of the year.

The Lago Petroleum concession covers the bottom of Lake Maracaibo, Venezuela. Lago is now shipping oil to Fall River and other American refinery centers.

International Petroleum, Ltd.

International Petroleum Co., Ltd., is making progress on its pipe line which is designed to carry 250,000 bbls. of crude a day from the DeMares concession of its Colombia subsidiary, Tropical Oil Co., to the seacoast, a distance of 400 miles. Stock of International has been steady at around 26 to 27, against a high of 28½ for the year.

International also has a large production of crude oil in Peru. It amounts to more than 7,000,000 bbls. annually.

Mid-Continent Petroleum

The current assets of the Mid-Continent Petroleum Co. approximate $21,000,000, of which more than $8,000,000 is cash. Current liabilities are about $2,500,000, according to the Wall Street Journal.

Pan American Position

The Wall Street Journal says: Net earnings of $16,539,000 by Pan American Petroleum & Transport Co. in the six months ended June 30, last, after interest, depreciation, depletion and taxes, are remarkable in view of the fact that they do not include any profit made by the California properties.

This is the best half year the company has reported and net is equal to $6.02 a share on 2,750,000 shares of A and B stock oustanding. If earnings continue at this rate, Pan American will exceed its record year of 1922, when it showed a net profit of $31,575,000 for the full year. The 1925 earnings already are $1,354,000 in excess of the profits for all of 1924. At the rate so far this year Pan American would show $12 on its stock, but allowing for some decrease due to lower gasoline prices the company ought to show $9 a share.

Gasoline is a minor part of the company's business, which is principally fuel oil. Pan American is the largest seller of fuel oil in the world, and most of its contracts are arranged yearly, so that fluctuations in prices of fuel oil are not large.

Pan American Petroleum & Transport Co. has never received any income from its California properties, previously operated under the name of Pan American Petroleum Co. of California. That company, with its California properties, except the Naval Reserve which is in litigation, are to be taken over by the Pan American Western Petroleum Co. That was part of the arrangement made when E. L. Doheny sold control of Pan American Petroleum & Transport Co. A stock to a group consisting of Standard Oil Co. of Indiana, Blair & Co., Inc., the Chase banking group and English interests represented by Lord Inverforth.

All Pan American Petroleum & Transport Co. dividends, accordingly, have been paid out of revenue from its Mexican oil properties.

In the Pan American Western trans-

NEW YORK STOCK EXCHANGE—LIST OF ACTIVE STOCKS

Stocks—	Par	‡Dividends Rate	Closing Quot. Sept.21	Sept.14	1925 High	1925 low	1924 High	1924 Low	1923 High	1923 Low
American Republics	..	..	*55	*67	76	48	48	25	..	..
Associated Oil	25	8	36	36⅝	40½	32	34⅝	27⅝	29½	29½
Atlantic Ref. com.	100	..	100½	102	117½	95½	140½	78½	100	98¾
Barnsdall "A"	25	..	20⅝	21½	30	15⅝	22½	14	37	9⅞
California Pet. com.	25	7	26½	27⅝	33⅝	23⅞	39	19⅝	28½	17½
General American Tank	..	†3	57⅝	56⅞	58½	45	53	35½	71⅝	40
General Petroleum	25	8	45⅝	48⅛	59	52	46	38⅝	..	..
Houston Oil	100	..	65	69	85	59	82½	61	78	40⅝
Independent Oil & Gas	..	†1	24	25⅝	41⅝	13½	16¼	6⅝	11¼	3⅝
Indian Refining	10	..	8⅝	7½	10⅝	5⅛	7	4⅝	8⅛	4
Louisiana Oil	10	..	14⅝	15¼	23⅝	13⅜	..	..	..	..
Maracaibo	..	..	*21	23½	35½	21	37½	25⅝	28¼	16
Mariland	..	†3	42½	44¼	46⅞	32⅝	43	29	59⅝	18½
Mexican Seaboard	..	..	13	13⅜	22⅛	11½	25⅝	14⅛	19⅝	5¾
Mid-Continent Pet.	..	..	29⅛	30	36	25⅝	40½	22⅝	62⅛	23¾
National Supply	50	6	56½	57	71	56⅝	72½	54	68	54
Pacific Oil	50	†3	53½	54⅛	65½	51⅝	58¼	45	52½	31½
Pan-American com.	50	12	64	67	83⅞	61	65	44¼	93½	53
Phillips Petroleum	..	†2	38¼	39⅝	47⅛	36½	42¼	28½	69⅝	19⅝
Producers & Refiners	50	..	14⅝	*15	32⅝	13½	43½	29⅝	58¼	17½
Pure Oil com.	..	6	21¼	27¼	33⅝	25½	30¼	20	32	16¼
Royal Dutch N. Y. sh.	13.40	4.42½	49⅝	50⅜	57⅝	48¼	59½	40⅝	55½	40½
Shell Transport	10	3.30	*40	40⅝	45⅝	39⅝	42	33	41½	29½
Shell Union com.	..	†1.40	22¼	22⅞	28⅝	25⅝	22½	16⅜	19¼	12⅜
Simms Petroleum	10	..	19⅜	20½	26⅝	19½	24	10⅜	16⅝	6½
Sinclair Consolidated com.	..	..	18¾	19½	24⅝	17	27½	16	39⅝	16
Skelly Oil	25	..	25½	26⅝	34½	21⅝	29	17⅞	58	12⅛
Standard of California	25	8	62⅝	64⅝	67¼	61½	68½	55⅛	64½	47½
Standard of N. J. com.	25	4	39⅝	40⅝	47⅛	38⅝	42½	33	44¼	30⅞
Superior Oil	6	..	3	3¼	6¼	2⅜	8¼	2⅜	6⅝	2
The Texas Co.	25	12	47⅛	49⅛	54⅝	42¾	45⅝	37⅜	52⅜	24⅝
Texas Pacific Coal & Oil	10	..	11¼	12¼	23⅜	11	16¼	8¼	24⅝	5½
Tide Water Oil (new)	..	4	32⅛	33½	†152	122	151	116¼	144	94
Transcontinental	..	..	2⅝	3⅜	5⅜	3⅜	6¼	3⅝	14⅛	1¼
Union Oil of California	25	7.3	33⅜	34⅛	43⅝	33⅛	39	36⅛	..	..
Union Tank com.	100	5	*124	*120¼	134	118½	132⅝	94	114	106
White Eagle Oil & Ref.	..	2¼	25⅝	26⅛	31⅝	25⅝	29⅝	23⅛	30⅝	29½
Standard Oil Stocks										
Anglo-American Oil	£1	25	22⅜	*22⅝	26⅝	18	18⅝	14⅝	19⅜	13½
Borne Scrymser	100	12	236	235	240	212	264	150	153	110
Buckeye Pipe Line	50	14	57	57	72	58½	85⅛	51	94	57⅜
Chesebrough Mfg. Co.	25	14	62	63½	70	48¾	52½	29¼	340	205
Crescent Pipe Line	25	..	*16	*16	17	10	20	11¼	25	15
Cumberland Pipe Line	100	12	*142	*144	166	128	148	108	117	80
Eureka Pipe Line	100	8	*71	72	96	70	105	74	117¼	87
Galena Signal com.	100	..	35½	38⅛	68½	34½	69⅜	53½	78	55
Humble Oil & Refining	25	4.8	62⅛	60⅝	72⅝	42½	43⅝	36	41	28¼
Illinois Pipe Line	100	12	138	138½	154½	127	161	123	171	115
Imperial Oil (Ltd.)	..	†2	30⅜	32	32½	27¾	119	99	123	92
Indiana Pipe Line	50	3	66⅔	67	84	66⅔	110	66	103	81
International Pet. Co.	10	x50	26⅝	26¼	28⅝	22⅜	24⅝	16⅝	24⅝	13¼
Magnolia Pet. Co.	100	4.5	*139	*137	159	130⅝	162	126	166	123
National Transit	12.50	16	20	*20	25½	19½	25⅞	20⅝	29	19½
New York Transit	100	8	53¼	56¼	79	50	97	54½	138	70
Northern Pipe Line	100	6	79	*78	88	78	107½	72	111	96
Ohio Oil Co.	25	8	62⅝	62⅜	75¼	60	79½	53	85⅝	48⅝
Penn.-Mex. Fuel	25	..	*22	*21	44	23	35⅝	27	45	10½
Prairie Oil & Gas	25	†3	47¼	50	65½	48⅝	269	193	273	152
Prairie Pipe Line	100	8	124¾	*125	127½	106	111	100	117	93
Solar Refining Co.	100	15	*215	218	259	200	240	170	212	161
South Penn Oil	100	..	157	164	197	159	176	117	196	160
Southwest Pa. Pipe	100	6	*60	60	84	60	89	68	89	66
Southern Pipe Line	100	4	76½	77	103	75½	100	80½	116	87
Standard of Indiana	25	10	61⅛	63¼	70	59½	69⅜	54¼	69⅜	48½
Standard of Kansas	25	..	32	31½	46	30¼	50½	32½	56¼	36⅜
Standard of Kentucky	25	16	139½	131¼	131⅜	114⅜	121⅞	101	109½	76
Standard of Nebraska	100	20	235	239	270	231	262	198	280	186
Standard of New York	25	5.6	51½	41¼	48⅝	40	48	37⅝	49⅝	35½
Standard of Ohio, com.	100	10	*354	356	369	338	337½	277	320	270
Swan & Finch, com.	25	..	*17½	16½	27	14½	28	20	..	..
Vacuum Oil	25	†3.75	85⅝	87⅝	96¼	80⅝	83½	50½	55½	40
Washington Oil	10	..	*30	*30	30½	30	39	25	28	20½
Miscellaneous Stocks										
Continental	10	10	27	25	31⅛	21⅞	..	..	..	..
Gulf Oil Corp. of Pa.	25	6	73¾	74½	79	63½	67⅝	56	68¼	45⅝

*Bid, no sales. †In dollars. ‡The figures in this column are kept up to date as far as possible, but are not guaranteed. xCents per share. ‡Old stocks.

The Oil and Gas Journal's weekly average price of 20 representative petroleum stocks listed on the New York Stock Exchange was as follows:

Sept. 21	$51.65	Aug. 17	$51.35	July 13	55.98
Sept. 14	53.02	Aug. 10	52.78	July 6	55.96
Sept. 7	51.13	Aug. 3	54.51	June 29	56.36
Aug. 31	51.16	July 27	56.21	June 22	57.29
Aug. 24	52.06	July 20	57.13	June 15	58.01

action, Pan American Petroleum & Transport Co. gets $23,047,000. That is made up of $9,447,000 from stockholders of Pan American Petroleum & Transport Co. as proceeds of the sale of 402,000 shares of Pan American Western Petroleum Co. at $23.50 a share; $2,350,000 obtained from the Petroleum Securities Co., a Doheny family company, through the sale of 100,000 shares at $23.50 a share and $11,250,000 Pan American Western Petroleum Co. 15-year 6 per cent notes.

In return Pan American Petroleum & Transport Co. sold all its California properties.

So far as dividends are concerned, Pan American Petroleum & Transport Co. will be better off in that it will now get at least interest on that money.

NORTH TEXAS MARKET WAS FAIRLY STRONG

FORT WORTH, Tex., Sept. 21.—Refined oils in the North Texas territory maintained a fairly strong market throughout the past week, some products showing slight advances and some showing a tendency to weaken. There was no heavy buying but up to late in the week there were a few buyers still in the market with inquiries for small amounts of gasoline.

There was only light buying of gasoline for export, probably not more than 50 cars all told. One concern bought around 20 cars and another picked up about 30 cars in scattered purchases.

Prices quoted on U. S. Motor oil were 9¾ to 10 cents, 56-58, 450 end point gasoline was selling at 9½ to 9¾ cents and 64-66, 375 end point stuff was bringing a price of 11 to 11¼ cents. The impression seems to be rather general that 56-58, 450 end point gasoline will soon begin to weaken, as cooler weather is not far away. The market on natural gasoline was practically unchanged,, all grades being quoted at around 12 cents.

The market on kerosene is in very good condition. The 41-43 water white is quoted at 4¾ to 5 cents with the prime white grade running ⅛ of a cent less. There is considerable demand for kerosene and most of the refiners have but very little on hand.

The gas oil market is in very fine shape with little to be had. Prices are 3¼ to 3½ cents with most sales late in the week going at the latter figure. The fuel oil market is somewhat softer. This product seemed to be fairly plentiful late in the week on the Wichita Falls market at $1.07½ to $1.10 per barrel. There was only a moderate demand.

The crude market remains in a very firm condition with no indications there will be an early reduction. This brings hopes to refiners that refined oil will suffer no heavy slashes. Some major pipe line companies are still soliciting new connections in North Texas territory and all seem to be very willing to accept them when offered.

NEW MEXICO FIELDS

(Continued from Page 32)

the proven area. The Ohio Oil Co. also is completing No. 4 on the Toomey Allen lease, which is standing 1,200 feet in fluid from two sands at 2,066-78 and 2,084-92 feet.

A wildcat test was spudded in this week in Section 4-18-23 near the city of Hope on what appears to be a large structure. This well, drilled by the Hope Development Co., will be closely watched by operators as it is between the Artesia Field and the Arkansas Fuel Co.'s well on the Manning Dome. M. L. Smith, of El Paso, in charge of the operations, has let the contract to the Seidler Drilling Co., of Wewoka, Okla.

New State Rules

As provided for by the 1925 Session Laws of New Mexico, State Geologist E. H. Wells has formulated rules and regulations to govern gas in New Mexico. He also has prepared a series of forms to be used by drillers and operators in making requests and reports to the State geologist.

The State laws provide for two classes of oil and gas inspectors—county oil and gas inspectors for patented lands, to be appointed by the boards of county commissioners, with the approval of the State geologist, and inspectors for State lands, to be appointed by the State geologist with the approval of the commissioner of public lands.

One county has selected a county inspector, this being San Juan County, where L. R. McFann, of Washington, is serving in that capacity. Mr. McFann also has been appointed State inspector for the northwestern part of New Mexico. R. Paine, of Artesia, has been appointed oil and gas inspector for State lands in the southeastern part of the State by Mr. Wells.

The enforcement of the laws and regulations dealing with oil and gas is delegated to the State geologist, and to the oil and gas inspectors. Broad authority has been given to the inspectors and they will be in a position to grant authority to shoot wells, shut off water, plug wells, etc. Copies of the regulations and various forms to be used have been distributed by the inspectors with the regulations becoming effective September 15.

The Bureau of Mines also is preparing a report on the Artesia Field and these, it is expected, will be distributed in the very near future.

Drilling Report—Eddy County

Bailey & Cragin's No. 1 Randolph permit, in the SW NE Section 33, cleaning out after shot; George Bobb's No. 3 Thompson permit, drilling at 575 feet; No. 4, Section 19, drilling; D. C. Cheesman's No. 2, drilling at 100 feet; D. C. Cheesman's No. 1 Massey permit, spudded in; D. C. Cheesman's No. 1, Section 35, shut down; California-Reiff No. 1 Reiff permit, fishing; Colorado Drilling Co.'s Irvin No. 1, Section 8, shut downt at 650 feet; Compton No. 1, Section 27, below 500 feet; Danciger Oil & Refining Co.'s No. 3, Section 28, drilling at 2,150 feet; Danciger Oil & Refining Co.'s No. 2, Section 18, drilling below 2,100 feet, 1,700 feet of oil in hole; Danciger No. 2, Section 17, drilling below 700 feet; Danciger-Kaseman's No. 2, drilling at 600 feet; Danciger-Kaseman's No. 4, rigging up; Danciger, in SW cor. SE NW Section 4-18-28, rigging up; Dome Oil Co.'s No. 2, cleaning out; Flynn, Welch & Yates' No. 23, drilling at 1,000 feet; No. 24, drilling at 1,270 feet; No. 25, drilling at 420 feet; No. 26, drilling at 1,250 feet; No. 27, rigging up; No. 28, drilling in; No. 29, drilling at 1,000 feet; Fletcher Oil Co.'s No. 1, preparing to shoot; Hogan-Johnson's No. 1, drilling below 2,350 feet; Monita Oil Co.'s No. 1 Cronin permit, fishing; Maljamar Oil & Gas Co.'s No. 9, cleaning outt after shot; No. 10, drilling in; No. 11, drilling at 1,720 feet; Mesa Oil Co.'s No. 1, drilling at 2,500 feet; Midwest Petroleum Co.'s No. 1, drilling at 2,390 feet, hole full of water; Ohio Oil Co.'s No. 1 Tracy permit, drilling at 4,360 feet; Ohio Oil Co.'s No. 1 McCullough permit, drilling at 1,890 feet; Ohio Oil Co.'s No. 2 Toomie-Allen, drilling in; Ohio Oil Co.'s No. 4 Toomie-Allen, drilling in, 1,200 feet of oil in hole; Ohio Oil Co.'s No. 2 Gilliland, on production; Pueblo Oil Co.'s No. 1, drilling in, will shoot; Pioneer Oil & Gas Co.'s No. 1, completing validation hole; Quillin, Dill Bros., Smith & Waterson's No. 1, validation hole completed; A. H. Ramage's No. 1, drilling at 2,590 feet in sand; Snowden & McSweeney's No. 1 McNutt permit, drilling at 3,730 feet, hole half full of water; Snowden, McSweeney & McNutt's No. 6, cleaning out after shot; Stephens and other's No. 1, drilling below 800 feet; Thompson & Workman's No. 1, on production; Williams Petroleum Co.'s No. 2, drilling at 870 feet; V. K. F. Oil Co.'s No. 4, drilling at 900 feet; No. 5, drilling at 850 feet; No. 1, Section 23-18-28, drilling at 1,100 feet.

Chaves County

Arkansas Fuel Co.'s No. 1 Manning Dome, straightening hole; Buffalo-Roswell No. 1, shut down at 3,200 feet; Dresser No. 1, drilling below 1,700 feet; Franks No. 1, drilling at 730 feet.

Lea County

Covert and others' No. 1, fishing at 350 feet; Tilton-Croft's No. 1, shut down at 1,100 feet; Holmes No. 1, shut down; Ross No. 1, drilling, good showing at 1,025 feet; Ward No. 1, drilling, depth not reported.

San Juan County

Continental's No. 1 Table Mesa, waiting for cement to set, preparing to drill in; West Coast No. 1, drilling at 980 feet, Aztec sand dry; Hunting Park No. 1, shut down at 1,310 feet to repair rig; Rainbow's No. 1 Ute Pasture, fishing at 1,875 feet; National Petroleum Co.'s No. 1, drilling, depth not reported; Four States No. 1, cleaned hole of collapsed pipe to resume drilling; Munoz-Continental No. 1 Beautiful Mountain structure, drilling below 3,150 feet; Munoz No. 11 Rattlesnake structure, drilling at 450 feet; No. 17, deep test, drilling at 230 feet.

McKinley County

Union-United No. 1, Section 30-14-9, fishing; Colonel Pierce's No. 1, Section 13-15-10, drilling below 700 feet; California Syndicate, Section 1-17-9, drilling at 1,000 feet.

Rio Arriba County

Munoz Continental No. 1, SE Section 25-24-1e, below 1,800 feet; Paul S. Ache of Denver No. 1, Section 13-31-1w, spudded in.

San Miguel County

Marland No. 1, Bell ranch, Section 3, drilling below 2,700 feet in black lime; New Mexico No. 1, Section 33-18-18, shut down; No. 2, shut down at 1,325 feet awaiting coal; Patterson & Stuppi's No. 1, Section 25-17-16, spudded in.

Mora County

Arkansas Fuel Co.'s No. 1, Section 11-19-21, drilling below 1,965 feet in a brown shale.

Colfax County

Union Oil Co., Vermejo Park, Section 5-31-19, preparing to drill in after cementing at 3,450 feet.

De Baca County

McAdoo No. 1, Buffalo Creek structure, Section 16-1s-27, drilling below 1,650 feet; Eddleman-Woods' No. 1, Section 6-4n-20, shutting off water at 200 feet; Hinkle No. 1, Section 4-2n-20, drilling; Spaulding Dome No. 1, Section 2-6-26, drilling below 3,800 feet; Hall & Hall, Sction 23-3s-26, ready to spud in.

Torrance County

Munoz No. 1, Section 5-6-7, spudded in; McLean No. 1, Section 8-8-15, drilling below 325 feet; Hatch Pettroleum Co. of Whittier, Calif., made location in SE, Section 26-8-11.

Sandoval County

Jemez No. 1, Township 16n-1w, drilling below 600 feet.

Catron County

Red Feather, Cow Springs No. 1, Section 30-4-9, drilling below 750 feet.

Guadalupe County

Transport Oil Co., Section 10-3n-17, shut down.

Quay County

Olean Petroleum Co., Section 10-3n-17, drilling below 600 feet.

Roosevelt County

Capital Oil Co., Section 9-1s-30, drilling below 900 feet.

Luna County

Angelus No. 4, Section 26-23-11, drilling.

Hidalgo County

Black Drilling Co.'s' No. 1, Section 19-21-18, spudded in; No. 2, Section 5-22-19, spudded in.

NORTH CENTRAL TEXAS

(Continued from Page 32)

bine, running casing at 600 feet; West Texas Exploration Co.'s No. 1 Macy, drilling at 500 feet.

Crockett County

Cook and others' No. 1 University, drilling at 2,130 feet; Crockett Drilling Syndicate's No. 2 Shannon, 465 feet. Humble Oil & Refining Co.'s No. 2 Powell, in red sand at 1,780 feet; No. 1 Harris, setting casing at 700 feet.

Haskell County

Adams and others' No. 1 Proctor, plugging back to 2,100 feet; Herbert Oil Co.'s No. 1 Macon, 1,240 feet; Kouri and others' No. 2 Ballard, 1,310 feet.

Stonewall County

Arkansas Fuel Oil Co.'s No. 1 Craft, spudding.

Garza County

Marland Oil Co.'s No. 1 Connell, on lime at 2,010 feet.

Scurry County

California Co.'s No. 1 Wood, showing oil at 3,085 feet.

Jones County

Red Bank Oil & Gas Co.'s No. 1 Alexander, fishing at 600 feet.

Palo Pinto County

Upham Gas Co.'s No. 2 Chestnut, drilling at 4,030 feet; Adams and others' No. 2 Pollard, cleaning out at 1,701 feet; Hart and others' No. 2 Cardwell, cleaning out at 2,600 feet; Hart Oil Corp.'s No. 10 Hart, cleaning out at 2,250 feet; Moore & Snebold's No. 1 Slemmons, drilling at 3,135 feet; Upham Gas Co.'s No. 4 Belding, 3,000 feet.

Parker County

English and others' No. 1 Peters, drilling at 1,020 feet; Swensondale Oil Co.'s No. 1 Evans, drilling at 4,125 feet.

Erath County

Moore and others' No. 1 Burch, drilling at 500 feet.

CALIFORNIA PRICES

Gravity	Long Beach	Huntington Beach Brea-Olinda	Rosecrans	Torrance Inglewood	Whittier LaHabra	Montebello	Coyote	Santa Fe	Newhall McKittrick	Midway-Sunset Elk Hills	Lost Hills Belridge	Coalinga	Wheeler Ridge
14°	$1.00	$1.00	....	$1.00	$1.00	$1.00	$1.00	....	$ .90	$ .90	$ .90	$ .90	$ .90
15°	1.02	1.02	....	1.02	1.00	1.00	1.00	....	.90	.90	.90	.90	.90
16°	1.04	1.04	....	1.04	1.00	1.00	1.00	....	.90	.90	.90	.90	.90
17°	1.06	1.06	....	1.06	1.00	1.00	1.00	....	.90	.90	.90	.90	.90
18°	1.08	1.08	....	1.08	1.00	1.00	1.00	....	.90	.90	.90	.90	.90
19°	1.10	1.10	....	1.10	1.00	1.00	1.00	....	.90	.90	.90	.90	.90
20°	1.12	1.12	....	1.12	1.01	1.01	1.02	....	....	1.94	.94	.91	.91
21°	1.14	1.14	....	1.14	1.02	1.02	1.04	....	....	.98	.98	.92	.92
22°	1.16	1.16	....	1.16	1.03	1.03	1.08	....	....	1.02	1.02	.93	.93
23°	1.18	1.18	....	1.18	....	1.05	1.12	....	....	1.06	1.06	.95	.95
24°	1.22	1.22	....	1.22	....	1.07	1.16	$1.07	....	1.10	1.10	.99	.97
25°	1.26	1.26	....	1.26	....	1.09	1.20	1.10	....	1.16	1.16	1.04	.99
26°	1.30	1.30	$1.30	1.30	....	1.11	1.24	1.16	....	1.24	1.24	1.09	1.01
27°	1.34	1.34	1.34	1.34	....	1.13	1.30	1.22	....	1.32	1.32	1.14	1.03
28°	1.38	1.38	1.38	1.38	....	1.16	1.36	1.28	....	1.40	1.40	1.19	....
29°	1.42	1.42	1.42	....	....	1.19	1.42	1.34	....	1.48	1.48	1.24	....
30°	1.46	1.46	1.46	....	....	1.22	1.48	1.40	....	1.56	1.56	1.29	....
31°	1.52	....	1.52	....	....	....	....	1.46	....	1.64	1.64	1.34	....
32°	....	....	1.58	....	....	....	....	1.52	....	1.72	1.72	1.39	....
33°	....	....	1.64	....	....	....	....	1.60	....	1.80	1.80	1.44	....
34°	....	....	1.70	....	....	....	....	1.68	....	....	1.88	1.49	....
35°	....	....	1.76	....	....	....	....	1.76	....	....	....	1.54	....
36°	....	....	1.84	....	....	....	....	1.84	....	....	....	....	....
37°	....	....	1.92	....	....	....	....	1.90	....	....	....	....	....
38°	....	....	2.00	....	....	....	....	2.00	....	....	....	....	....
39°	....	....	2.08	....	....	....	....	....	....	....	....	....	....
40°	....	....	2.16	....	....	....	....	....	....	....	....	....	....
41°	....	....	2.24	....	....	....	....	....	....	....	....	....	....
42°	....	....	2.30	....	....	....	....	....	....	....	....	....	....

REFINING AND MARKETING

Europe's Oil Demand Only Beginning Says Belgian Distributor

Oil and refined markets of the United States never had a better outlook than they have now so far as foreign demand is concerned. European consumption of petroleum products, although it has increased by leaps and bounds in the last six months, is only in its infancy and America is the country to which the other countries must turn to supply their enormous future needs.

This was the prediction of Capt. Constant R. Cloquet, general manager of the Compagnie Generale Anversoise, one of the largest oil distribution companies of Belgium and France, with headquarters at Antwerp and Paris. Captain Cloquet spent several days in Tulsa the past week on a month's business trip to America.

It has been only in the last six months that the industries of Europe have had their first real chance to develop since the war, and with business conditions getting on a normal basis there is no limit to the amount of oil and refined goods which European countries will need to enable the enormous expansion of their industrial life, the captain explained.

While at present and for the immediate future, the greatest need is for lubricating oils, automobiles are beginning to come into their own and will place a heavy demand on motor fuel. European cars are being designed to use as little gasoline as possible, but nevertheless, there will be an enormous call for the fuel as the automobile industry is just in its infancy there.

United States refineries stand unchallenged as the only logical source of Europe's petroleum products, according to Captain Cloquet. While other countries may have some oil their competition with America will be only slight. Next to America Russia is the best source of Europe's petroleum products and it cannot compete with America for two reasons, the captain explained. In the first place, Russia's oil is only of one kind and is capable of producing only a heavy lubricating oil and a painter's naphtha, which would not meet Europe's needs. In the second place, the Russian Government is too unstable and lacks the means and foresight to develop its oil resources.

European countries at present use 29 different kinds of refined products and the United States is the only country so far which can supply more than one or two kinds, according to Captain Cloquet.

There are considerable oil deposits in the Belgian Congo, according to Captain Cloquet, but because of lack of money it will be many years before these can be developed enough to offer any competition to American oil.

Captain Cloquet explained there was only one thing which might prove a drawback to American oil trade to European countries and that is the interference the Government places in the way of the development of the petroleum industry. He pointed out that England and other countries offered every inducement and protection possible for the oil industry and the fact that the American Government meddled in oil affairs would cause Europeans to lose confidence in the United States industry.

While in Tulsa, Captain Cloquet closed a deal with the Barnsdall Refining Co. for a large order of lubricating oil to be delivered in Antwerp and Paris over a period of several years. The value of the order will mount into the seven figures. An order also was placed with the Galena Signal Co., which Captain Cloquet's company also represents.

NEW STILLS AT CASPER

CASPER, Wyo., Sept. 21.—Work on the 12 high pressure stills at the refinery of the Standard Oil Co. of Indiana will not be completed until early next year, according to T. S. Cooke, manager for the Rocky Mountain division for the company. Six of the stills may be in operation early in January while the other six will not be put in operation before February.

REFINERY AT RUSSELL SOON IN OPERATION

RUSSELL, Kans., Sept. 21.—With construction nearly completed, the new refinery being built here by Clinton H. Montgomery will start operation within the next week. The plant will have a capacity of 2,500 bbls. of crude daily, which will be supplied from Russell County pools.

During the past week, four bubble towers were completed, the tube stills have been installed and the plant connected with the city water system. The remainder of the equipment is on the ground and a large force of workmen is rushing its assembling.

CHICAGO POSTAL CONTRACT

CHICAGO, Sept. 21.—Announcement is made by the Chicago postoffice regarding bids for supplying gasoline for the three months beginning October 1. The lowest bidder was the Shaffer Oil & Refining Co., which bid 4 cents below the local tank wagon price, with a maximum of 12 cents or 12 cents flat over the period. It is assumed it will receive the contract although the department has not made official announcement. The Standard Oil Co. of Indiana was the next low bidder with a price of 3½ cents below the tank wagon and a maximum of 12½ cents or a flat price of 12½ cents over the period. The Sinclair Refining Co. evidently did not want the business as it simply kept its name in line for future consideration by bidding the local tank wagon price. The Jewett & Sowers Co. had the last two contracts. The price includes delivery to the sellers' storage, the department sending its own truck and takes the gasoline away and distributes it to the several stations.

LONG BEACH PLANTS CLOSE

LONG BEACH, Cal., Sept. 21.—Oil refineries within the city limits received a blow the past week when the Santa Fe Carbon Co. was denied an injunction restraining the city from prohibiting the operation of its plant here. The city recently passed an ordinance prohibiting the operation of plants within the city limits on the grounds that they were public nuisances. The action of the Superior Court upheld the ordinance.

CONFERENCE AT CASPER

CASPER, Wyo., Sept. 21.—Employes and company representatives from the general office and six refineries of the Standard Oil Co. of Indiana were in Casper Monday to attend the seventh annual industrial relations conference. Although discussions of problems of the company's employes featured the meeting, a number of leading officials also were on the program.

A. O. M. A. MEETING

CHICAGO, Sept. 21.—One of the features of the autumn meeting of the American Oil Men's Association at the Congress Hotel October 20 and 22 will be a display showing how oil is actually produced and refined. A miniature oil lease, a miniature refinery and cracking plant will be included in the exhibit.

SURVEY ON REFINERY PLAN BY MARKETERS

CHICAGO, Sept. 21. — With a contract let to an engineering firm to make a careful survey of building and operating costs, the first definite step toward the erection of a refinery has been taken by the National Petroleum Marketers Association, according to L. V. Nicholas, secretary.

In connection with the determining of the cost of operating a refinery, the committee representing the association has sent confidential questionnaires to every member of the association to determine the approximate gallonage of each.

ANTI-KNOCK FUEL FOR JERSEY COMPANY

The Standard Oil Co. of New Jersey has started marketing a new anti-knock gasoline, a product obtained from crude of one of the California fields. The gasoline, which is sold at a 3-cent premium over the regular service station price, is now being offered to the consumers in Baltimore and Washington, D. C. The company, it is understood, expects to widen gradually the marketing territory until it includes all of the states of the Atlantic Seaboard. Sales of the product have been large in Washington and Baltimore.

The gasoline is produced direct from the company refinery's operations and is not "doped." It was developed at the laboratory of the Bayway, N. J., refinery. A little coloring is added to the product to give it a red tinge so as to distinguish it from the usual motor fuel. To further distinguish the product, it is being dispensed from aluminum coated pumps. The new motor fuel, in addition to the anti-knock characteristics, is said to be of higher gravity. The latter fact is expected to increase its popularity with consumers during the winter months.

FURTHER REDUCTIONS IN OMAHA PRICE WAR

OMAHA, Neb., Sept. 21.—With the reduction Monday by the Standard Oil Co. of Nebraska of the tank wagon price of gasoline to 12 cents and the service station to 14 cents, another step was taken in Omaha's bitter gasoline war which has been going on all summer.

The Standard Oil Co. reduced prices two times last Friday in order to meet cut rate competition. The first cut being 1½ cents, making the tank wagon price 16 and the service station price 18 cents. This reduction was followed in the afternoon by a 3-cent slash. On a number of occasions in the past two months service station and tank wagon prices have been identical.

NORTH CAROLINA GASOLINE TAX

RALEIGH, N. C., Sept 21.—Showing an increase of $117,196 over the same month of 1924, a total of $896,954 was collected by the State Automobile License Bureau during August. The tax on gasoline sales jumped from $398,872 to $510,085.

OIL POLLUTION SUIT

LONG BEACH, Cal., Sept. 21.—Charging that the Atlantic Refining Co. has violated a recent act of Congress forbidding the flushing of oil tankers in coastal waters, city officials have announced they will file a test case in Federal court.

REFINERY EMPLOYES

HOUSTON, Tex., Sept. 12.—With an average of 12,156, Texas leads all other states in the number of persons employed in oil refineries, according to statistics compiled by the Department of Commerce. The total average refinery payroll of the United States is 66,717 persons. In other states the average number of wage earners are: Pennsylvania, 8,936; New Jersey, 8,927; California, 7,129; Oklahoma, 4,310; Louisiana, 4,209; Ohio, 3,102; Wyoming, 2,821; New York, 2,399; Illinois, 2,378; Kansas, 1,962; West Virginia, 483, and Kentucky, 371.

MILLION TONS OF OIL FOR GERMANY IN 1925

Germany is expected to import approximately 1,000,000 tons of petroleum products in the callendar year 1925. This figure would be 20 per cent below corresponding 1913 imports (1,232,000 tons) but in excess of previous post-war receipts. In 1922 imports amounted to 781,000 tons, in 1923 to 483,000, and in 1924 to 722,000. As the United States is the source of about 65 per cent on the average of all the petroleum imports of Germany the American petroleum export trade may be expected to share accordingly.

Official figures for the first six months of 1925 show total imports of 529,604 metric tons, of which the United States furnished 349,414 tons, or practically 66 per cent. This is 70 per cent above the amount imported from the United States in the first six months of 1924, 207,833 tons.

Mexico sold Germany more petroleum in the first six months of the current year than in the entire year 1294 (16,143 tons) or in 1923 (21,933 tons.) Likewise, Rumania sold almost as much in the first six months in 1925 as in the entire year 1924 (22,421 tons). Russia sold only a shade less in the six months period than in 1924 (13,733 tons), and Netherlands India sold 82 per cent more than in all of 1924 (14,578 tons). Poland sold 48,396 tons in the first half of 1925.

Exports during this period were negligible, amounting to 15,112 tons. The Hanover Fields produced only 60,000 tons in 1924, and this production is used only for lubricants, having but 2 to 3 per cent gasoline content. The local trade anticipates a production of about 70,000 tons of crude from Hanover in 1925, as have been opened to greater depths in new, though relatively unimportant, wells this area.

The larger local petroleum enterprises (the "Depag" and "Dea"), which published their annual reports during the first six months of 1925, passed dividends for 1924, but it was indicated that dividends might be declared on 1925 business, as production costs are being lowered.

COAL TO FORCE OUT OIL AS FUEL, HE SAYS

Harry L. Gandy, executive secretary of the National Coal Association, writing on the "Future for Coal" in the current issue of the Savings Bank Journal, says that "unlike some authorities in the oil industry, who have been advocating the superiority of fuel oil over coal, fuel oil is doomed to get off the market, leaving King Coal to reign." He continues:

"Several favorable signs are evident, indicating a turn of the tide. The increasing price for fuel oil, of which 391,000,000 bbls. (including crude oil burned for fuel), were burned last year is a potent factor in the equation. This quantity of oil is the equivalent, according to a statement by the United States Geological Survey, of about 92,000,000 tons of coal. Numerous authorities agree that the time is near at hand when oil for fuel purposes, other than naval use, will practically be off the market. When that time comes, King Coal will indeed reign. Research work likewise promises an enlarged use of this great source of energy."

Brief Items for Plant Operators

PROGRAM COMPLETED FOR A. S. T. M. MEETING

Arrangements for the program and entertainment of Committee D-2 of the American Society for Testing Materials which will meet in Tulsa October 5 and 6, were completed at a meeting of the Technical Committee of the Western Refiners Association held last week. H. W. Camp, general superintendent of the Empire Refineries, Inc., of Tulsa, is chairman of the entertainment committee.

Automobile trips to nearby fields and a banquet at the Mayo Hotel October 6 will be the principal entertainment features. F. A. Pielsticker, president of the Western Petroleum Refiners Association, will serve as toastmaster at the banquet. It is expected that 35 members of the committee from all parts of the country will be in attendance at the meeting. Sub-committee meetings will be held October 5, and the general meeting on the following day. The meeting is being held in Tulsa to give the members the opportunity of attending the International Petroleum Exposition and Congress.

REFINERY AT ARTESIA UNDER CONSTRUCTION

The Continental Oil Co.'s refinery at Artesia, N. Mex., is now under construction. Work on the foundations was begun last week, and it is thought that the entire construction program will be completed in about four months. It is reported that the Flynn, Welch & Yates interests, whose properties in the field are operated by the Continental, are interested in the new plant also. A 55,000-bbl. storage tank has been erected near the site of the refinery, and work has begun on a double track extension from the railroad.

In addition to the refinery construction, the National Supply Co. is putting up an all-steel building, and is surveying for a railroad spur. Black, Sivalls & Bryson, tank dealers, have erected a frame office building in Artesia, and other new business buildings are going up as a result of the development of the Artesia Field.

COMMODITY SPECIFICATIONS

WASHINGTON, D. C., Sept. 21.—Containing specifications for more than 6,000 commodities, the National Directory of Commodity Specifications has just been issued by the Bureau of Standards with the cooperation of the Bureau of Foreign and Domestic Commerce.

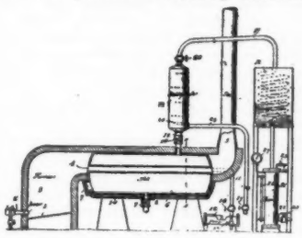
CARSON COUNTY PLANT

The first natural gasoline plant to be constructed in the Carson County Field of the Panhandle area in Texas is now being installed by the American Gasoline Co. The plant will probably start operating about October 15. It is being built on the unit plan, using the Newton process, with enough gas now available to have an initial output of 20,000 to 25,000 gallons daily. The large gas yield of the Panhandle area has not attracted natural gasoline plant operators because of its relatively low gasoline content. The gasoline will be moved by pipe line to Panhandle, a distance of 17 miles.

Recent Patents

1,550,892. Process for Cracking Petroleum Oil. Gustav Egloff and Harry P. Benner, Independence, Kans, assignors to Universal Oil Products Co., Chicago, Ill., a Corporation of South Dakota. Filed August 20, 1920. Serial No. 404,896. Three claims. Cl. 196—50.)

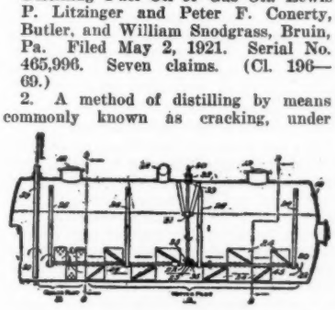
2. The process of cracking emulsified



petroleum oil, comprising subjecting the oil to surface heating alone to vaporize the same at a cracking temperature and pressure, in condensing and collecting the vapors produced.

1,551,410. Process and Apparatus for Distilling Fuel Oil or Gas Oil. Lewis P. Litzinger and Peter F. Conerty, Butler, and William Snodgrass, Bruin, Pa. Filed May 2, 1921. Serial No. 465,996. Seven claims. (Cl. 196—69.)

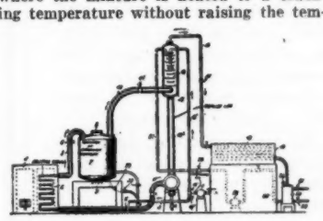
2. A method of distilling by means commonly known as cracking, under



pressure in excess of atmospheric, the hydrocarbons or petroleum residues, and particularly of the higher boiling points, comprising producing a forced circulation of the oil towards a cool part of the still and there agitating the oil to prevent the carbon deposition at said cool part, and effecting a separation of carbon particles in the oil at said cool part.

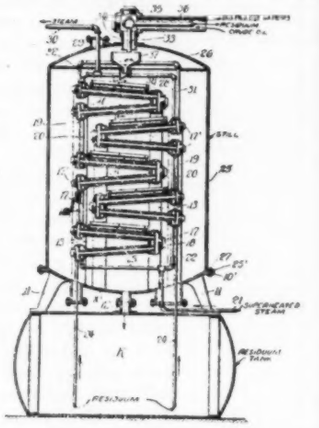
1,551,090. Process for Treating Hydrocarbons. Carbon P. Dubbs, Wilmette, Ill., assignor to Universal Oil Products Co., Chicago, Ill., a Corporation of South Dakota. Filed May 24, 1924. Serial No. 715,632. Eight claims. (Cl. 196—48.)

1. A process for the conversion of hydrocarbon oil into lower boiling point hydrocarbon products, consisting in passing a stream of reflux condensate and charging oil through a heating tube where the mixture is heated to a cracking temperature without raising the tem-



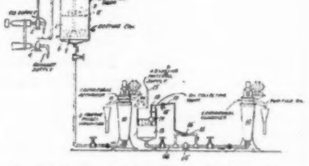
perature of the oil so high as to cause substantial deposition of carbon in the tube, passing the heated mixture from the tube to an enlarged reaction chamber where the oil mixture after passing through the tube separates without any substantial rise in its temperature into vapors and a non-flowing carbon residue largely free from residual oil and maintaining a superatmospheric pressure on the oil in said conduit and in said enlarged chamber, the ratio of the reflux condensate to the charging stock and the amount of heat supplied to the tubes being maintained sufficient to cause the separation of the oil mixture into said non-flowing carbon residue and vapors in the reaction chamber.

1,552,698. Still for Hydrocarbon Distillation. Francis M. Hess, Whiting, Ind. Filed November 20, 1922. Serial No. 601,971. 5 Claims. (Cl. 196—52.)



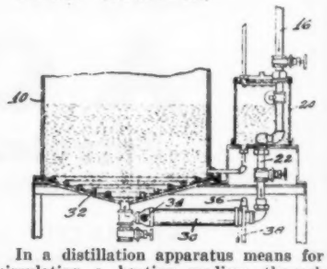
2. A still for hydrocarbon distillation systems comprising, in combination, internested hollow heating plates forming between them a zigzag conduit for the gravity flow of the material to be distilled, container screens mounted on the heating plates which form the bottom wall of said conduit, and a body of catalyzing material within each screen.

1,553,141. Oil Purification. Lee H. Clark, Rosemont, Pa., assignor to The Sharples Specialty Company, Philadelphia, Pa., a Corporation of Delaware, Filed November 29, 1924. Serial No. 752,874. 22 Claims. (Cl. 196—16.)



1. The method of purifying impure oil that contains finely divided carbon which comprises dispersing throughout the oil an aqueous alkaline reagent sufficiently diluted that water soluble impurities and water soluble products of any reaction produced by the reagent will be in solution in the aqueous phase of the resulting mixture, and centrifugally separating the aqueous phase from the oil.

1,552,433. Preheater for Stills. Henry A. Hills, Grand Rapids, Mich. Filed July 11, 1921. Serial No. 483,679. 1 Claim. (Cl. 196—15.)



In a distillation apparatus means for circulating a heating medium through the liquid in a still and preheating means for the liquid entering the still, comprising a supply pipe for the liquid, a jacket surrounding the same, a connection adapted to convey the spent heating medium from the still to the jacket and an elevated outlet from said jacket to form a water seal for the condensate in said spent heating medium.

AMONG THE TECHNICAL MEN

R. M. Coyle, who resigned this month as assistant general superintendent for the Chestnut-Smith Corp., to accept a position as chief engineer for the McGuire interests, is a technical man of long and varied experience.

R. M. Coyle

He left the Chestnut-Smith Corp. after being in charge of its natural gasoline plants at Ranger and Breckenridge, Tex., for two and one-half years. Previous to that he was with the Tidal Refining Co. at Tulsa; the Solway Process Co. of Hutchinson, Kans., and Syracuse, N. Y.; the Midco Co. at Bartlesville, and the Ohio Cities Service Co., now the Pure Oil Co. With the latter company he was general superintendent of the Oklahoma division.

In his new position as chief engineer for the McGuire interests, of which the Boudinet Gasoline Co. of Frankell, Tex., and the Newton Engineering Co. are representatives in the Mid-Continent, he will have general supervision over the installation of Newton systems in natural gasoline absorption plants. His headquarters will be at Breckenridge, Tex.

Mr. Coyle began his engineering and technical career in the mining business following his graduation from the University of Wisconsin in 1907.

Jobbers Are the "Minute Men" of Business

The original *"Minute Men"* were soldiers. They kept themselves in readiness to take up arms and fight in a minute's notice. Regardless of when the call might come—in the middle of the afternoon—in the foggy gray hours of the morning at any other time these *"Minute Men"* were always prepared to go.

Today there is another style of *"Minute Men."* You will find them in every business. They are the jobbers.

It is the jobber whom the retailers call on in hurry when stock is low. And the jobber must always be ready to deliver the merchandise even though the order may call for hundred different kinds and grades.

In the grocery business there is the jobber who serves as a ware-house for the grocers in his community. A grocer in one town may send him an order for coffee, canned peas and some bulk candy. Another grocer on the same day will call for catsup, soap and packaged sugar. The jobber must be always ready to fill both orders and many others similar to them.

Obviously it would be time-wasting and too expensive for the first grocer to order the coffee, peas and candy direct from the wholesalers. That would necessitate three different orders probably going to different parts of the country. The same would be true with the second grocer and so on indefinitely.

If such a condition existed the wholesaler would be receiving small orders from all parts of the country. He would have to install an elaborate clerical staff to keep these orders straight—he would have to maintain a costly and complicated shipping department.

However, there are the *"Minute Men"* of business—the jobbers. By buying in large quantities from the wholesalers they serve as a constant market which can be reached and sold economically because of the volume.

For the retailer the jobber is a ware-house. The order for coffee, peas and sugar goes to the same jobber. It is all in one order—and that order is filled at once.

Thus it is that a plan of economical distribution has been successfully worked out.

In the oil business there is the Acme Petroleum Company. They are always ready to draw from huge storage tanks the various kinds and grades of oil called for by dealer or user. These assorted orders are loaded on our own tank cars. The result is a smooth—efficient service. One that insures the profit of both refiner and dealer. Write us today for particulars.

(This is the thirty-seventh of a series of informatory advertisements on the distribution problems with which the oil industry has to contend.)

ACME

Petroleum Company

Executive Offices: 624 S. Michigan Ave., Chicago

KANSAS CITY, MO. Land Bank Bldg.

DALLAS, TEXAS Magnolia Bldg.

OIL STORAGE PLANTS

Over 7,000,000 Gallons Storage

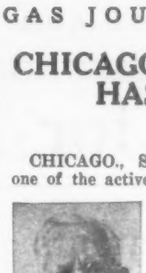
West Tulsa, Okla. Riverdale, Ill.

(Chicago Switching District)

CHICAGO MARKET FEELS GASOLINE HAS REACHED PEAK AT 10 CENTS

By John B. Waldo

CHICAGO., Sept. 21.—The head of one of the active distributing companies



stated during the week that he felt sure the consumption of gasoline over the Labor Day had broken all records. It was apparently this phenomenal consumption that started the price advance. A leading refiner offered gasoline to marketers at 8¼ cents on Saturday before the holiday and was willing to book 25 cars at that price. On Tuesday morning the same seller quoted the buyers 9½ cents as his lowest price. Others advanced their prices, in fact, the refiners unanimously asked advances and the tone of the market when the distributors came to replenish their supplies was so strong that they bought heavily.

The market is strong, but there are many who believe it is at its peak now and that those concerns who have advanced their prices to over 10 cents for U. S. Motors have rather exceeded the limit set by conditions of the demand and supply. In fact some of the best posted including executives of leading organizations want a steady market but they are afraid that an unseasonably high market right now would be as bad almost as a price range that was too low. It would only encourage a reaction to lower prices.

Distributors state that their gallonage has been reduced by recent rains and that the present consumption is only a little better than last year at this time. It is a fact that a year ago the gallonage was large and continued good through the early part of October.

Have Replenished Supplies

At the close of the week it seemed evident to many that the replenishment of supplies generally had been fairly well completed for the demand here was light in the way of new business and reports from refining centers showed little inquiry and few additional orders. However, refiners have a lot of business booked ahead and will not need to seek orders for some time. Some of them have evidently all the business that they care to take at present judging by the prices quoted on inquiries. Many are asking 10 cents for U. S. Motors, but a few name 10¼ cents as the price and one or two have wired in answer to inquiries that their price was 10½ cents. This was regarded as a polite way of saying that they could not handle the business. The bulk of the demand has been for the U. S. Motors grade with 56-58 a second call and more freely offered. Considerable of this grade is offered from North Texas but the price is regarded as high, being 9 cents. It is also stated that the Roxana Petroleum Corp. has been offering some of the 56-58 gravity out of Arkansas City and that its price was below the Texas quotation but this was denied here. The higher gravities have moved rather slowly although sales for export have been reported both on the 60-62 and the 64-66 gravities. It is believed that the demand for these grades will show improvement and that for the 56-58 will be less active. Natural gasoline has been in demand and prices are higher and strong.

Kerosene Demand Active

Kerosene continues in active demand and prices have passed the 5-cent mark. The supplies are light but some refiners are increasing their output of this product as they have a demand for it and find the price satisfactory. The Sinclair Co. has bought in this market during the week and is understood to still be ready to buy if the price is fair. It is, however, frequently in the market for kerosene.

Furnace oils are showing little activity. The spot business consists of a few cars from day to day. Most of the distributors have bought for the early part of the season and have sold little as yet to consumers. The latter are slow to order any kind of fuel. The local coal companies state that their deliveries so far this season have been much smaller than during the same part of the 1924 season. Why, it is hard to say. Possibly some of the lack of demand for coal is because of the installing of oil burners by the former buyers of coal. Prices are unchanged.

Naphthas continue to sell largely to the paint and varnish makers and for solvents. The Standard Oil Co. of Indiana has advanced its tank car prices for its three special grades 1 cent a gallon but has made no change in its tank wagon prices. The new prices are Oleum Spirits, 13 cents; V M & P naphtha, 14 cents, and Cleaners' naphtha, 15 cents, all f. o. b. Whiting in car lots. Turpentine has continued to advance sharply, largely on account of a short crop and a large demand from England.

Gas oil continues to drag along without any change. The bulk of the demand is from the gas companies who are drawing against contracts. The other source of demand is for furnace oil and some business has been done with the tank wagon distributors. Prices are steady at last week's figures.

Fuel Oil Slow

Fuel oil is moving slowly so far as new business is concerned. The consumption judging by orders received and drawings against contracts has not yet begun to show any substantial increase. There are some few users that have increased their stocks in storage partly because of the coal strike but generally this factor has been without influence in either coal or the fuel oil market. The steel mills report that there has been considerable buying by the railroads both of rails and equipment material and for some of the steel products advanced prices are being asked. Locally, at least, the demand for structural steel is very large. The steel mills should increase their fuel oil consumption. The railroads, according to reports, are not moving as much freight as they have been doing. For some reason their fuel oil consumption has shown some falling off. This is also the case with bunker fuel.

On the other hand, supplies of fuel oil are not freely offered and the product is rather hard to buy at a price that permits it to be sold again at a profit. Refiners generally are asking $1.05 for any gravity from an 18 up to 26 degrees. Some oil was bought at $1.00 during the week but it had a high sulphur content and could not be classed as a standard product. The trouble seems to be in many cases that refiners are selling to large users at prices on a par with their price to the trade. On the basis of a refinery price of $1.05 the oil should sell at not less than $1.10 to the consumer but it has happened several times this week that business has been lost on bids of $1.10. There has been some Smackover fuel oil offered at 95 cents during the week to the trade and it is believed that this price may continue although it is too low when judged by the cost of crude at the wells.

Lub Oils Unchanged

Lubricating oils show practically no change this week. The demand for motor oils is not as large as it was, it being too near the end of the season of largest consumption to encourage jobbers to do more than keep fair supplies. The industrial demand is still just called fair. Prices are unchanged. Wax is strong. Cylinder stocks a little lower in price with some sellers.

Tank wagon markets have not been changed generally but there have been a number of price reductions at rather important points. Minneapolis is again experiencing a rather active oil war and prices have been reduced by the Standard Oil Co. of Indiana to meet the local competition there. Other points have been cut and it is evident that the advance in refinery costs has not been great

enough as yet to stop price cutting or has not been recognized by the price cutters. One of the unsettling features of the situation is the inability or unwillingness of some of the distributors to apply the cumulative discounts in the same way that the Standard Oil Co. has planned and is doing. Some are making a sort of average discount and allowing it to all customers while others are continuing to rebate and give concessions in other ways. The fact that the major distributors of gasoline have allowed discounts for quantities on the cumulative plan has made many organizations beginning with auto clubs, but apparently having no real ending ask for discounts to their membership. The more important oil companies recognize that once they begin giving associations discounts to members there would be no ending to the practice and every organizations, including the local church societies and the Boy Scouts, would be after a discount for everybody has a car and wants to buy gasoline cheaply. Yet there is a suspicion, or more than a suspicion, that some oil companies have allowed discounts to some organizations, else why the suddenness with which some groups have developed a desire for only one dealers' gasoline. However, in an intensely competitive industry, such devices are to be expected. The mere fact of the adoption of the cumulative discount plan by the Standard Oil Co. of Indiana, which has been followed by others of the same group in other districts has increased the competition and it is rather to be expected that concerns competing for the business of the same customers will adopt plans and methods which they claim are no more wrong from the standpoint of good business methods, than the giving of cumulative discounts to concerns whose buying is distributed necessarily over a large number of different towns.

So far the plan of the National Petroleum Marketers Association for interchangeable coupons has fallen rather flat. A certain number of the independent jobbers welcomed it gladly and pledged their support. The first returns were favorable but a great majority simply paid no attention to the questionnaire sent out. Necessarily the success of the plan depended on its adoption by a considerable number of the independents at least. It must not be understood that the plan has been abandoned, far from it. But it is felt that greater and more intensive efforts will be needed to sell the idea to the independent branch of the industry. There is some talk of the merging of oil distributing companies but as yet the petroleum industry has not taken kindly to the idea of voluntary merging of properties, refining or distributing. For one reason, most of the concerns are doing not at all badly and their argument is, why change?

PENNSYLVANIA MARKET SHOWING BETTER TURN

OIL CITY, Pa., Sept. 21.—Pennsylvania refiners are now of the opinion that the corner has been turned in the refined oil market and that this part of the industry is on the mend. Throughout the past week there has been an improvement shown in the industry. It has a better turn and slightly higher prices are now prevailing. This condition is most noticeable in gasolines and cylinder stocks, although it is also prevalent in the other products.

DRILLING IN ALBANIA

Regarding the drilling in Albania, the London Oil News says the deep wells to be put down in the neighborhood of Valona will be drilled with two Trauzl rigs which are already on the way to Valona. The drilling will be under charge of Mining Councillor Dr. Letso. The Italian Board of Trade has established a special section to take charge of the investigation and production of the Albanian oil area on the lines of the agreement between the two countries.

EASTERN MARKET AGAIN REDUCED; TANKWAGON PRICES BEING CUT

By N. O. Fanning

NEW YORK, Sept. 21.—The refined oil markets in the East were marked with another general reduction in gasoline tank wagon prices during the past week. The Standard Oil Co. of Kentucky made a reduction of 1 cent in the tank wagon price of gasoline in Florida and Georgia and on Saturday the Standard Oil Co. of New Jersey reduced gasoline one-half cent in entire territory with exception of New Jersey, Baltimore and Washington.

In general the gasoline situation is still weak. Tank wagon prices are being cut freely by small independents, according to reliable reports, concessions of 2 and 3 cents being given. The source of this gasoline is said to be the Mid-Continent Field. Statements have been made that California gasoline is being offered as low as 10¼ cents at New York. These statements, according to the best information, do not fit in with the facts of the case.

It is pointed out that practically all buyers of California gasoline must provide for transportation from the Pacific Coast, and also must buy in cargo lots, ranging from about 2,500,000 gallons up. Obviously, the companies equipped with facilities or financial resources to bring California gasoline around to the Atlantic Seaboard are limited in number. For that reason the refiners who are actually selling gasoline on the Eastern Coast are not those who find it necessary to dump it on the market at any price.

The actual cost of California gasoline laid down at New York is 10½ cents or better. But the amount actually brought here during the past few months has constituted only a small percentage of the total amount going into consumption. The price at which it has been sold, for the most part, has been that which has been dictated by competition with gasoline coming in cargo or tank car lots from the Mid-Continent Field. This price has been between 12 and 13 cents at Bayonne, and the price at interior points has been higher due to rail transportation charges.

Truth About Pacific Gasoline

The bulk of the California gasoline brought in to the Atlantic Seaboard and marketed here has been for the account of not more than four large companies who have mingled it with other gasoline in their sales, without dumping it all in one spot at a low price. Due to the fact that lower prices are forced at interior points by competition from Western Pennsylvania, Central West and Mid-Continent refiners most of the California gasoline has been sold in the largely populated centers along the Atlantic Coast, such as Boston, Providence, New York, Baltimore, Philadelphia and so on. There are, of course, exceptions, but this is the rule.

Source of Price Cutting

The real source of price cutting on the Atlantic Seaboard has been the large army of small retailers, combined with refiners who have been willing to sell to these under cover at a sacrifice. This is the opinion expressed by an important marketer here. It has been charged that some refiners sell through their own stations a given grade of gasoline at one price, but are also willing to sell to other retailers a lower grade of gasoline at a lower price. Unfortunately there is not enough discrimination among buyers to eliminate the sellers of low grade gasoline.

That California is an indirect factor in the gasoline price situation on the Atlantic Seaboard cannot be denied. The way this competition works is that large eastern refiners buy gasoline in California which they might otherwise have purchased from Mid-Continent refiners. It is not certain, however, that they would have been under the necessity of going to the Mid-Continent, the real urge behind their Pacific Coast purchases being the cheapness of the product there.

When gasoline can be bought below the cost of production, it is natural that they should purchase it instead of producing.

Consumption Lower

The consumption of gasoline during the past week has fallen off somewhat, due to some cooler weather, throughout the Atlantic Seaboard. This drop in consumption has been offset somewhat by the action of Atlantic Coast refiners in curbing production. Influx of gasoline from outside sources has been so great, however, that in general the price situation has not been improved.

Kerosene Market

Kerosene is unchanged, with no decided improvement in the statistical situation. Refiners are quite heavily loaded up with this product, but hope to put over a campaign for the sale of furnace oil this winter which will eat into stocks of kerosene. Furnace oil is used in many small home oil-burning devices. This is a grade of oil verging on kerosene, ranging in gravity from 38 to 42 Baume.

In as much as kerosene has been one product of crude oil the sale of which has slumped off over a period of years, the development of furnace oil sales promises to stop a gap which has worried many refiners for some time. The advance of the use of gas and electric lights in rural districts, attributed indirectly to the use of automobiles and consequent education of the farmer to the more modern conveniences, has cut largely into the use of kerosene. The export demand for kerosene has also suffered abroad for this and other reasons.

Furnace oil now sells for 9 to 10 cents in various sections of the Atlantic Seaboard, based on tank wagon lots of 1,500 gallons or thereabouts. Straight kerosene brings 12½ to 13 cents per gallon.

It is hoped, therefore, that with the advance of winter, kerosene will show a more steady tone, and that current prices will not have to be shaded.

The bulk price of kerosene at New York in tank car lots is about 6¼ cents per gallon. Very little business of this class is being done at present, although inquiries in the Mid-Continent are said to have bolstered the price there in recent weeks. It is expected that this strength will be communicated to the Eastern markets in the near future.

Gas and Fuel Oil

The market for gas oil remains firm. Fuel oils are also steady, with little change in demand except for higher grades. Considerable California fuel oil is coming in. This movement has been largely to offset smaller receipts from Mexico, and applies to the unrefinable grades.

Lubricating Oils

The lubricating oil markets have not shown much life. Demand has been somewhat smaller, but no important price changes were made during the week.

The industrial demand for both lubricating oils and wax has improved notably. Inquiries for these products from the paper, textile and other important industries on the Atlantic Seaboard have come in in large volume. It is expected refiners will sell only on firm bids.

Petrolatum Firmer

Small increases in petrolatum prices have been recorded. Amber is now quoted at 3¼ cents in barrels, carload lots, an advance of one-fourth cent per pound.

Export Market

No material change in the export situation can be recorded. It is regarded as significant in export circles that recent reductions in prices in the United States have not brought any great amount of purchasing on the part of European buyers. This is regarded as indicating the latter are waiting still lower prices, in as much as European buying traditionally comes in at or near the bottom of the market.

No reports of exports from New York were available during the past week. The Oil and Gas Journal expects to resume weekly statements within a week or so, however.

Tanker Charters

New fixtures in the tanker charter market included the following:

Tanker Aal (Br.), 2,116 tons net, October loading, Atlantic Coast to Portugal, 21s, one port, 22s, two ports.

Tanker Tejon (Am.), 4,336 tons net, Gulf Coast to north of Hatteras, time, balance of 1925, prompt delivery, 18 cents per barrel.

As noted from the above, tanker chartering rates are still scraping bottom.

Oil Receipts

Estimated daily average receipts of crude and refined oil at Atlantic Coast ports during the week ended September 16 were 475,000 bbls. compared with 508,000 bbls. the preceding week. Receipts from the Gulf Coast averaged 322,000 bbls. daily, compared with 336,000 the week ended September 9. Receipts from California averaged 67,000 bbls., against 93,000.

Imports averaged 86,000 bbls. daily, compared with 79,000. The feature is the continued small imports, indicated by comparing the record of the last few weeks with the monthly imports shown in the table.

The following table shows estimated daily average receipts of crude and refined oil by water at Atlantic Coast ports from the Gulf and Pacific Coasts of the United States, and imports, for the last three months; also monthly record for the last 12 months (figures in barrels):

	Week Ended		
	Sept. 16	Sept. 9	Sept. 2
Gulf Coast	322,000	336,000	267,000
Pacific Coast	67,000	93,000	23,000
Imports	86,000	79,000	56,000
Total	475,000	508,000	346,000

Daily Averages by Months				
1925—	Gulf	Pacific	Imports	Total
August	291,000	54,000	90 000	435,000
July	391,000	63,000	107,000	561,000
June	379,000	66,000	118,000	563,000
May	312,000	81,000	145,000	538,000
April	353,000	78,000	101,000	532,000
March	273,000	82 000	135,000	490,000
February	262,000	51,000	147 000	460,000
January	311,000	77,000	133,000	521,000
1924—				
December	306,000	83,000	85,000	474,000
November	246,000	80,000	150,000	476,000
October	246,000	120,000	88 000	454,000
September	270,000	104,000	101,000	475,000

The foregoing estimates are based on the carrying capacity of incoming oil-laden tankers.

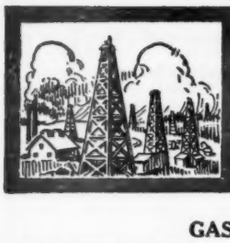
CALIFORNIA RECEIPTS AND PETROLEUM IMPORTS

Receipts of California crude and refined at Atlantic and Gulf Coast ports for the week ended September 12, totaled 947,362 bbls., a daily average of 135,338 bbls., against 214,000 bbls., a daily average of 30,571 bbls. for the week ended September 5.

	Week Ended Sept. 12
At Atlantic Coast Ports:	
Boston	221,000
New York	272,362
Philadelphia	72,000
Others	304,000
Total	869,362
Daily average	124,195
At Gulf Coast Ports:	
New Orleans and Baton Rouge	78,000
Total	78,000
Daily average	11,143
Total Atlantic and Gulf Coast Ports	947,362
Daily average	135,338
Daily average 4 weeks ended	68,656

Imports of crude and refined oils at the principal United States ports for the week ended September 12, totaled 851,350 bbls., a daily average of 121,623 bbls., compared with 980,959 bbls., a daily average of 149,714 bbls. for the week ended September 5.

	Week Ended Sept. 12
At Atlantic Coast Ports:	
Baltimore	70,000
Boston	65,000
New York	236,000
Philadelphia	124,350
Others	213,000
Total	708,350
Daily average	101,193
At Gulf Coast Ports:	
Galveston district	143,000
Total	143,000
Daily average	20,430
At All United States Ports:	
Total	851,350
Daily average	121,623
Daily average 4 weeks ended	138,155



REFINERY AND CRUDE PRICES

Quotations on Principal Refined Products and Crude Petroleum Markets in All the American Oil Fields

GASOLINE AND NAPHTHA

	Sept. 22		Sept. 15		Sept. 8	
OKLAHOMA (Group 3)—						
50-52 450 end point (Naphtha)	.09	.09½	.08¼	.08½	.07¾	.08
56-58 450 end point	.09½	.09¾	.08¾	.09	.07¾	.08
58-60 437 end point (U. S. Motor)	.10	.10¼	.09	.09½	.08¼	.08½
60-62 400 end point	.11	.11½	.10½	.10¾	.10	.10¼
64-66 375 end point	.12	.12¼	.11½	.11¾	.11	.11¼
68-70 350 end point	.13	.13¼	.12½	.13	.11¾	.12
KANSAS—						
58-60 437 end point (U. S. Motor)	.10¼	.10½	.09½	.09¾	.08½	.08¾
NORTH TEXAS—						
48-52 450 end point (Naphtha)	.09		.08	.08¼	.07¾	
50-52 440 end point (Naphtha)	.09	.09¼	.08¼	.08½	.07¾	.08
56-58 450 end point	.09½	.09¾	.08¾		.07¾	.08
58-60 437 end point	.10	.10¼	.09	.09¼	.08⅛	.08¼
60-62 400 end point	.10¾	.11	.10¼	.10½	.09⅞	.10
64-66 390 end point	.11½	.11¾	.11	.11¼	.10½	.10¾
64-66 375 end point	.11¾	.12	.11¼	.11½	.10¾	.11
68-70 360 end point	.12¾	.13	.12½	.12¾	.11¾	
NORTH LOUISIANA—						
56-58 450 end point	.09¾	.10	.09	.09¼	.08¾	.09
58-60 437 end point (U. S. Motor)	.10	.10¼	.09½	.09¾	.09	.09¼
60-62 400 end point	.11¼	.11½	.10¾	.11	.10¾	.11
64-66 390 end point	.12	.12¼	.11½	.11¾	.11½	.11¾
64-66 375 end point	.12¼	.12½	.11¾	.12	.11¾	.12
ARKANSAS—						
58-60 450 end point	.10¼	.10½	.09¼	.09½	.08¾	.09
58-60 437 end point (U. S. Motor)	.10½	.10¾	.09½		.09	.09¼
64-66 375 end point	.12½	.12¾	.12	.12¼	.11¼	.11½
ROCKY MOUNTAIN STATES—						
*58-60 437 end point (U. S. Motor)	.13	.13¼	.12	.12¼	.11¼	.11½
PENNSYLVANIA—						
52 Naphtha	.12	.12¼	.12	.12¼	.12	.12¼
54 Naphtha	.12	.12¼	.12	.12¼	.12	.12¼
56 Naphtha	.12¼	.12½	.12¼	.12½	.12¼	.12½
58 Naphtha	.12½	.12¾	.12¼	.12½	.12½	.12¾
60 Gasoline	.13½	.14	.13¼	.13½	.13½	.13¾
62 Gasoline	.14¼	.14½	.14	.14½	.14	.14½
64 Gasoline	.15½	.16	.15¼	.15½	.15¼	.15½
66 Gasoline	.16	.16½	.16	.16½	.16	.16½
68-70 Gasoline	.19½	.20	.18½	.19	.18½	.19
CALIFORNIA—						
54-58 437 end point (U. S. Motor) domestic	.09	.09½	.09	.09½	.09	.09½
CHICAGO DIST. (Based on Group 3)—						
50-52 450 end point (Naphtha)	.08½	.08¾	.08¾	.09	.08	.08¼
56-58 450 end point	.09¼	.09½	.08¾		.08	.08¼
58-60 437 end point (U. S. Motor)	.10	.10¼	.09	.09¼	.08½	
60-62 400 end point	.10¾	.11	.10¼	.10½	.10	.10¼
64-66 375 end point	.11¾	.12	.11½	.11¾	.11	.11¼
68-70 360 end point	.12¾	.13	.12¼	.12½	.11¾	.12

NATURAL GASOLINE

	Sept. 22		Sept. 15		Sept. 8	
OKLAHOMA (Group 3)—						
Grade Double A, 80-87.9, 375 e.p., rec. 90%	.13¼	.13½	.12	.12¼	.11½	.11¾
Grade A, 72-79.9, 375 end point, rec. 90%	.13¼	.13½	.12	.12¼	.11½	.11¾
Grade Double B, 84-92, 375 e.p., rec. 85%	.13¼	.13½	.12	.12¼	.11½	
Grade B, 76-83.9, 375 end point, rec. 85%	.13¼	.13½	.12	.12¼	.11½	
Grade C, 80-90, 375 end point, rec. 78%	.13¼	.13½	.12	.12¼	.11¼	.11½
NORTH TEXAS—						
Grade Double A, 80-87.9, 375 e.p., rec. 90%	.13¼	.13½	.12	.12¼	.11½	
Grade A, 72-79.9, 375 end point, rec. 90%	.13¼	.13½	.12	.12¼	.11½	
Grade Double B, 84-92, 375 e.p., rec. 85%	.13¼	.13½	.12	.12¼	.11½	
Grade B, 76-83.9, 375 end point, rec. 85%	.13¼	.13½	.12	.12¼	.11½	
Grade C, 80-90, 375 end point, rec. 78%	.13¼	.13½	.12	.12¼	.11½	
NORTH LOUISIANA—						
Grade A, 72-79.9, 375 end point, rec. 90%	.13¼	.13½	.12¼	.12½	.12	.12¼
Grade B, 76-83.9, 375 end point, rec. 85%	.13¼	.13½	.12	.12¼	.12	.12¼
Grade C, 80-90, 375 end point, rec. 78%	.13¼	.13½	.12	.12¼	.12	.12¼
CALIFORNIA—						
78-85 absorption, 360-390 end point	.11	.11½	.11	.11½	.11	.11½
78-84 compression, 350 end point	.11½		.11½		.11½	
CHICAGO DIST. (Based on Group 3)—						
Grade Double A, 80-87.9, 375 e.p., rec. 90%	.12¾	.13	.11½	.11¾	.11¼	.11½
Grade A, 72-79.9, 375 end point, rec. 90%	.12¾	.13	.11½	.11¾	.11¼	.11½
Grade Double B, 84-92, 375 e.p., rec. 85%	.12¾	.13	.11½	.11¾	.11¼	
Grade B, 76-83.9, 375 end point, rec. 85%	.12¾	.13	.11½	.11¾	.11¼	
Grade C, 80-90, 375 end point, rec. 78%	.12½	.12¾	.11½	.11¾	.11	.11¼

MOTOR NATURAL GASOLINE (BLENDS)

	Sept. 22		Sept. 15		Sept. 8	
OKLAHOMA (Group 3)—						
60-62 450 end point	.09¾	.10¼	.08¾	.09¼	.08¼	.08½
68-70 430 end point	.10¾	.11	.10¼	.10½	.09	.09¼
NORTH TEXAS—						
58-60 450 end point	.09¾	.10	.08¾		.08¼	
PENNSYLVANIA—						
*60-62	.13¼	.13½	.13½	.13¾	.13½	.13¾
*64-66	.13¼	.13½	.13½	.13¾	.13½	.13¾
*66-68	.13¼	.13½	.13½	.13¾	.13½	.13¾
*68-70	.13¼	.13½	.13½	.13¾	.13½	.13¾
CHICAGO DIST. (Based on Group 3)—						
60-62 450 end point	.09¼	.09½	.08¾	.09	.08¼	.08½
68-70 437 end point	.10¼	.10½	.09	.09¼	.08½	.08¾

*At Sistersville, W. Va.

BURNING OIL

	Sept. 22		Sept. 15		Sept. 8	
KANSAS—						
41-43 water white Kerosene	.05¼	.05½	.05	.05¼	.04¾	.05
OKLAHOMA (Group 3)—						
41-43 water white Kerosene	.05¼	.05¼	.04¾	.05	.04¾	.05
42-44 water white Kerosene	.05½		.05¼	.05½	.05¼	
40-41 prime white Kerosene	.04½	.04¾	.04¼	.04½	.04	.04⅛
NORTH LOUISIANA—						
41-43 prime white Kerosene	.05¼	.05⅜	.05	.05¼	.05	.05¼
42-44 water white Kerosene	.05½	.05⅝	.05¼	.05½	.05¼	.05½
ROCKY MOUNTAIN STATES—						
*40-44 water white Kerosene	.08⅛	.08¼	.07¾	.08	.07½	.07¾
NORTH TEXAS—						
41-43 water white Kerosene	.05	.05⅛	.04⅝	.04⅞	.04⅜	.04½
40-42 prime white Kerosene	.04½	.04¾	.04⅛	.04½	.04	.04⅜
41-43 prime white Kerosene	.05		.04⅜	.04⅝	.04¼	.04⅝
42-44 water white Kerosene	.05¼	.05½	.05		.04⅞	.05
ARKANSAS—						
41-43 water white Kerosene	.05	.05¼	.05	.05¼	.04¾	.05¼
42-44 water white Kerosene	.05½		.05½		.05¼	.05½
PENNSYLVANIA—						
43 Kerosene prime white	.06	.06¼	.06	.06¼	.06	.06¼
45 Kerosene water white	.06½	.06¾	.06¼	.06½	.06¼	.06½
46 Kerosene water white	.06¾	.07	.06½	.06¾	.06½	.06¾
47 Kerosene water white	.07	.07¼	.06¾	.07	.06¾	.07
34 Neutral	.07	.07¼	.07	.07¼	.07	.07¼
34 Sundebloom Neutral	.08	.09	.08	.09	.08	.09
36 Miners' Neutral	.06¾	.07	.06¾	.07	.06¾	.07
300 Mineral Seal	.07	.07¼	.07	.07¼	.07	.07¼
CALIFORNIA—						
40-42 water white (high burning test)	.07½	.08	.07½	.08	.07½	.08
Engine distillate, 43-45 445 end point	.07½	.08	.08½	.09	.08½	.09
Engine distillate, 42-45 480 end point	.07	.07¼	.07¾	.08	.07¾	.08
CHICAGO DIST. (Based on Group 3)—						
41-42 water white Kerosene	.05	.05¼	.04⅞	.05¼	.04½	.04⅝
42-44 water white Kerosene	.05½	.05⅝	.05¼	.05½	.05	.05¼

*Colorado points.

FUEL OILS

	Sept. 22		Sept. 15		Sept. 8	
KANSAS						
24-26 Fuel Oil	1.15	1.20	1.15	1.20	1.15	
32-36 Gas Oil	.03¼	.03⅜	.03¼	.03⅜	.03¼	.03⅜
38-40 Distillate	.03¾	.03⅞	.03¾	.03⅞	.03¾	.03⅞
OKLAHOMA (Group 3)—						
Below 22 Fuel Oil (sellers' cars)	1.02½	1.05	1.02½	1.05	1.00	
22-26 Fuel Oil (sellers' cars)	1.05	1.07½	1.05		1.00	1.05
24-26 Fuel Oil (buyers' cars)	1.05	1.10	1.05	1.10	1.02½	1.05
24-26 Fuel Oil (sellers' cars)	1.05	1.10	1.05	1.10	1.02½	1.05
28-30 Fuel Oil (sellers' cars)	1.12½	1.15	1.12½	1.15	1.10	1.15
32-36 Gas Oil	.03⅛	.03¼	.03⅛	.03¼	.03⅛	.03¼
36-38 Distillate	.03½	.03⅝	.03½	.03⅝	.03¼	.03½
38-40 Straw Distillate	.03⅝	.03⅞	.03⅝	.03⅞	.03⅝	.03¾
NORTH TEXAS—						
24-26 Fuel Oil (sellers' cars)	1.10	1.15	1.10	1.15	1.10	1.12½
26-30 Fuel Oil	1.15		1.15		1.12½	1.15
32-36 Gas Oil	.03¼	.03½	.03¼	.03½	.03⅛	.03½
38-40 Straw Distillate	.03½	.03¾	.03½	.03¾	.03½	.03¾
NORTH LOUISIANA—						
18-20 Fuel Oil	1.00	1.05	1.00	1.05	1.00	1.05
32-36 Gas Oil	.03½	.03¾	.03½	.03¾	.03½	.03¾
ARKANSAS—						
38-40 Distillate	.03¾	.03⅞	.03¾	.03⅞	.03⅝	.03¾
32-36 Gas Oil	.03½	.03⅝	.03½	.03⅝	.03½	.03⅝
22-26 Refinery Fuel Oil	1.05	1.10	1.05	1.10	1.05	1.10
GULF COAST (South Texas)—						
Gas Oil	.04½	.04¾	.04½	.04¾	.05	.05¾
Fuel Oil	1.45	1.50	1.45	1.50	1.45	1.50
PENNSYLVANIA—						
30-34 Fuel Oil	.05⅛	.05¼	.05⅛	.05¼	.05⅛	.05¼
36-40 Fuel Oil	.05¼	.05½	.05¼	.05½	.05⅝	.05½
CALIFORNIA—						
33-36 Distillate	.04¾	.05	.04¾	.05	.04¾	.05
27-33 Distillate	.04	.04½	.04	.04½	.04	.04½
15-20 Fuel Oil (at tidewater)	1.20	1.25	1.20	1.25	1.20	1.25
27 plus Diesel Oil	1.45	1.50	1.40	1.50	1.40	1.50
CHICAGO DIST. (Based on Group 3)—						
24-26 Fuel Oil (sellers' cars, Group 3)	1.07½	1.12½	1.05	1.10	1.05	1.10
18-22 (El Dorado)	1.05	1.10	1.00	1.05	1.00	1.05
18-20 (Smackover)	1.00		1.00	1.05	1.00	1.05
32-36 Gas Oil	.03⅛	.03¼	.03⅛	.03¼	.03	.03¼
36-38 Distillate	.03⅝	.03⅞	.03⅝	.03¾	.03⅝	.03¾
38-40 Straw Distillate	.03⅞	.04⅛	.03¾	.04	.03¾	.04

LUBRICATING OILS AND WAX

	Sept. 22		Sept. 15		Sept. 8	
OKLAHOMA (Group 3)—						
79-80 vis., 2½ color, 20-25 cold test	.05¼	.05½	.05¼	.05½	.05¼	.05½
100 vis., 3 color, 20-25 cold test	.05¾	.06	.05¾	.06	.06	.06½
100 vis., 2 color, 20-25 cold test	.06¼	.06½	.06¼	.06½	.06	.06¼
150 vis., 3 color, 20-25 cold test	.10½	.11	.10½	.11	.10½	.11
150 vis., 4 color, 20-25 cold test	.10¼	.10¾	.10¼	.10¾	.10¼	.10¾
180 vis., 4 color, 23-28 cold test	.10¾	.11¼	.10¾	.11¼	.10¾	.11
180 vis., 3 color, 23-28 cold test	.11	.11½	.11	.11½	.11	.11½
200 vis., 3 color, 23-28 cold test	.12	.12½	.12	.12½	.12	.12½
200 vis., 4 color, 23-28 cold test	.11¾	.12¼	.11¾	.12¼	.11¾	.12¼
220 vis., 3 color, 25-30 cold test	.14½	.15	.14½	.15	.14½	.15
220 vis., 4 color, 25-30 cold test	.14	.14½	.14	.14½	.14	.14½
240 vis., 3 color, 25-30 cold test	.16	.16½	.16	.16½	.16	.16½
240 vis., 4 color, 25-30 cold test	.15½	.16	.15½	.16	.15½	.16
280 vis., 3 color, 25-30 cold test	.17½	.18	.17½	.18	.17½	.18
280 vis., 4 color, 25-30 cold test	.16½	.17	.16½	.17	.16½	.17
Red Neutrals:						
180 vis., 5 color, 23-28 cold test	.10½	.11	.10½	.11	.10½	.11
180 vis., 6 color, 23-28 cold test	.10	.10½	.10	.10½	.10	.10½
200 vis., 5 color, 23-28 cold test	.11½	.12	.11½	.12	.11½	.12
200 vis., 6 color, 23-28 cold test	.11	.11½	.11	.11½	.11	.11½
220 vis., 5 color, 25-30 cold test	.13½	.14	.13½	.14	.13½	.14
220 vis., 6 color, 25-30 cold test	.13	.13½	.13	.13½	.13	.13½
240 vis., 5 color, 25-30 cold test	.15	.15½	.15	.15½	.15	.15½

REFINERY AND CRUDE PRICES

Quotations on Principal Refined Products and Crude Petroleum Markets in All the American Oil Fields

240 vis., 6 color, 25-30 cold test	.14½	.15	.14½	.15	.14½	.15
280 vis., 5 color, 25-30 cold test	.15½	.16	.15½	.16	.15½	.16
Cylinder Stocks:						
180-200 vis., S. R. green, 40-45 cold test	.08½	.09	.09	.09½	.09	.09½
190-200 vis., S. R. green, 40-45 cold test	.07½	.08	.08	.08½	.08	.08½
170-190 dark green, 40-45 cold test	.06	.06½	.06½	.07	.06½	.07
190-200 vis. @ 210 "D" Bright Stock	.36		.36		.36	
200-210 vis. @ 210 "E" Bright Stock	.31		.31		.31	
150 vis. @ 210 "D" Bright Stock	.30		.30		.30	.32
150 vis. @ 210 "E" Bright Stock	.28		.28		.28	
Waxes:						
124-126 White Crude Scale Wax	.05¼		.05¼	.05½	.05¼	.05½
PENNSYLVANIA—						
150, 3 color	.17		.17		.17	
180, 3 color	.21		.21		.21	
200, 3 color	.23¼		.23¼		.23	
220, 3 color	.25		.25		.25	
600, steam refined	.16		.15		.15¼	
635, steam refined	.19		.18¼		.19¼	
650, steam refined	.21		.19½		.20½	
600 Pennsylvania flash	.24½		.24		.24½	
630 Pennsylvania flash	.33		.32		.33	
*550, E filtered	.19½		.19½		.19¾	
600, E filtered	.19½		.19½		.19½	
*600, E filtered	.21		.20¾		.20¾	
600, D filtered	.26		.26		.26½	
550, E filtered	.19		.19		.19	
550, D filtered	.23		.23		.23	
Pennsylvania Bright Stock	.38		.38		.38	
122-124 White Crude Scale Wax	.05½		.05½		.05½	
†124-126 White Crude Scale Wax	.05⅝		.05⅝		.05⅝	

*At Warren, Pa. †At New York City.

GULF COAST (South Texas)—						
Zero Black	.06	.07	.06	.07	.06	.07
No. 2 color, 100 vis., pale oil	.07	.07½	.07½	.08	.07½	.08
No. 2½ color, 150 vis., pale oil	.09½	.10½	.10	.11	.10	.11
No. 3, color, 200 vis., pale oil	.11½	.12	.12	.12½	.12	.12½
No. 3½ color, 300 vis., pale oil	.15	.15½	.15½	.16	.16	.16½
No. 3¾ color, 500 vis., pale oil	.18	.18½	.18½	.19	.18½	.19
No. 4 color, 750 vis., pale oil	.19½	.20	.20	.20½	.20½	.21
No. 1½ plus color, 150 vis., pale filtered	.21		.21		.21½	
No. 2 plus color, 200 vis., pale filtered	.22½		.22½		.23	
No. 2 color, 300 vis., pale filtered	.26½		.26½		.26½	
No. 2½ color, 500 vis., pale filtered	.30½		.30½		.30½	
No. 2½ color, 750 vis., pale filtered	.40½		.40½		.40½	
No. 5 to 6 color, 200 vis., red oil	.10	.10½	.10½	.11	.10½	.11
No. 5 to 6 color, 300 vis., red oil	.12	.12½	.12½	.13	.12½	.13
No. 5 to 6 color, 500 vis., red oil	.14	.14½	.14½	.15	.14½	.15
No. 5 to 6 color, 750 vis., red oil	.17½	.18	.18	.18½	.18½	.19
CALIFORNIA—						
130 pale, 2½-3 color	.12	.12½	.12	.12½	.12	.12½
200 vis., 2½-3 color	.15½	.16	.15½	.16	.15½	.16
300 vis., 3 -3½ color	.17	.17½	.17	.17½	.17	.17½
350 vis., 3½-4 color	.18½	.19	.18½	.19	.18½	.19
400 vis., 3½-4 color	.20	.20½	.20	.20½	.20	.20½
Red Neutrals:						
200 vis., 4½-5 color	.14	.14½	.14	.14½	.14	.14½
300 vis., 5 -6 color	.15	.15½	.15	.15½	.15	.15½
400 vis., 5 -6 color	.17	.17½	.17	.17½	.17	.17½
500 vis., 4½-5 color	.20	.21	.20	.21	.20	.21
500 vis., 6 -6½ color	.18	.19	.18	.19	.18	.19
600 vis., 6½ plus color	.19	.19½	.19	.19½	.19	.19½

Note: Bright stocks are not manufactured commercially on the Pacific Coast.

NEW YORK DOMESTIC MARKET

Bayonne Refinery Prices:	Sept. 22	Sept. 15	Sept. 8
U. S. Motor Gasoline, 58-60 437	.13	.13	.13
Export Gasoline, 64-66 Be.	.16	.16	
*Bunker Oil, 14-16 Be.	1.65	1.65	1.65
Diesel Oil, New York City	2.10	2.10	2.10
Furnace Oil, New York City	.09	.09	.10
Gas Oil, 32-36 Be.	.06¼	.06¼	.06¼
41-43 Kerosene prime white	.06	.06	.06

*Lighterage, 6.5c a barrel extra.

NEW YORK EXPORT PRICES

Motor Gasoline:	Sept. 22	Sept. 15	Sept. 8
58-60 Be. gravity, in cases	.27.65	.27.65	.28.15
Standard White Kerosene, in cases	.16.15	.16.15	.16.15
Water White Kerosene, in cases	.17.15	.17.15	.17.15
†Lubricating Oils (in bulk):			
Cylinder Stock, extra filtered, 600, barrels	.35	.35	.35
Cylinder Stock, light filtered, 600, barrels	.30	.30	.30
No. 1 white Neutral, .878 spec. grav.	.36	.36	.36
No. 5 Bright Stock, .897 spec. grav.	.40	.40	.40
Special "A" red oil, .897 spec. grav., 170 vis.	.12	.12	.12
No. 2 red oil, .903 spec. grav., 212 vis.	13	.13	.13
No. 1 red oil, .905 spec. grav., 265 vis.	.14	.14	.14
Polar red oil, .903 spec. grav., 295 vis.	.15	.15	.15
Pale oil, "25" .899 spec. grav.	.13½	.13½	.13½
Pale oil, "28" .892 spec. grav.	.09	.09	.09
Paraffin Wax:			
120-122 a.m.p., per lb.	.06⅛	.06⅛	.06⅛
125-127 a.m.p., per lb.	.06¼	.06¼	.06¼
130-132 a.m.p., per lb.	.06⅝	.06⅝	.06⅝
135-137 a.m.p., per lb.	.07½	.07½	.07½
Petrolatum, in bbls., carload lots, per lb.:			
Amber	.03½	.03	.03
Light amber	.03¾	.03¾	.03¾
Cream	.06	.06	.06

†All lub prices in barrels.

LOS ANGELES EXPORT PRICES

	Sept. 22		Sept. 15		Sept. 8	
Kerosene water white	.05	.05½	.05	.05½	.05	.05½
U. S. Motor Gasoline, 54-56 437 end point	.08¾	.09½	.08¾	.09¼	.08¾	.09¼

CRUDE OIL PRICES

Arkansas and North Louisiana

Caddo, 38° and above	$1.95
35° to 37.9°	1.85
32° to 34.9°	1.75
Below 32°	1.65
Homer, 35° and above	1.75
32° to 34.9°	1.65
31° to 32.9°	1.55
Below 31°	1.40
Haynesville, 33° and above	1.65
Below 33°	1.55
El Dorado, 33° and above	1.65
Below 33°	1.55
Bull Bayou, 38° and above	1.75
35° to 37.9°	1.60
32° to 34.9°	1.45
Cotton Valley	1.10
De Soto	1.80
Crichton	1.60
Bellevue	1.65
*Stephens, Ark.:	
Below 26°	1.20
26° and above	1.40

*Posted by Atlantic Oil Producing Co.

Smackover:

(Standard Oil Co. of Louisiana)

Below 24°	.85
24° to 24.9°	1.15
25° to 25.9°	1.20
26° to 26.9°	1.25
27° and above	1.30

(The Texas Co.)

Below 24°	.85
24° to 25.9	1.05
26° and above	1.35

(Atlantic Oil Producing Co.)

Below 23°	.90
23° to 23.9°	.95

Wyoming and Montana

Rock Creek (Wyo.)	1.75
Salt Creek:	
29° to 29.9°	1.23
30° to 30.9°	1.31
31° to 31.9°	1.39
32° to 32.9°	1.47
33° to 33.9°	1.55
34° to 34.9°	1.63
35° to 35.9°	1.71
36° to 36.9°	1.79
37° and above	1.87
Big Muddy	1.75
Mule Creek	1.25
Grasa Creek (light)	1.90
Elk Basin	1.90
Lance Creek	1.90
Osage	1.90
Cat Creek (Mont.)	1.90
Sunburst (Mont.)	1.30
Lost Soldier	1.10
Greybull and Torchlight	1.90
Hamilton Dome	1.55
Hogback, N. Mex.	1.95
Artesia (N. Mex.)	1.45

Lost Soldier and Lander based on contracts.

Oklahoma, Kansas, North and East Central Texas

Prairie Oil & Gas Co. and other major purchasing companies, except as noted:

28° to 28.9°	1.15
29° to 29.9°	1.23
30° to 30.9°	1.31
31° to 31.9°	1.39
32° to 32.9°	1.47
33° to 33.9°	1.55
34° to 34.9°	1.63
35° to 35.9°	1.71
36° to 36.9°	1.79
37° to 37.9°	1.87
38° to 38.9°	1.95
39° to 39.9°	2.03
40° to 40.9°	2.11
41° to 41.9°	2.19
42° to 42.9°	2.27
43° to 43.9°	2.35
44° to 44.9°	2.43

*Humble Oil & Refining Co.

(North Texas, Ranger, Mexia, Powell, Richland, Wortham, Lytton Springs, Currie, Moran)

28° to 28.9°	1.35
29° to 29.9°	1.41
30° to 30.9°	1.47
31° to 31.9°	1.53
32° to 32.9°	1.59
33° to 33.9°	1.65
34° to 34.9°	1.71
35° to 35.9°	1.77
36° to 36.9°	1.83
37° to 37.9°	1.89
38° to 38.9°	1.95
39° to 39.9°	2.01
40° to 40.9°	2.07
41° to 41.9°	2.13
42° to 42.9°	2.19
43° to 43.9°	2.25
44° and above	2.31

Magnolia Petroleum Co.—

Below 28°	1.00
28° to 30.9°	1.35

Other grades same as Humble Oil & Refining Co. in Texas and Prairie Oil & Gas Co. in Oklahoma and Kansas.

Gypsy Oil Co.—

Bristow, Glenn Pool, Morris and Perryman:

25° to 25.9°	.91
26° to 26.9°	.99
27° to 27.9°	1.07

Other grades same as Prairie Oil & Gas Co.

*The Texas Co. pays Humble schedule in Texas and the Prairie Oil & Gas Co. schedule in Oklahoma.

Gulf Coast

Grade A	1.50
Grade B	1.25
Luling (Magnolia)	1.40
Laredo (Magnolia Petroleum Co.)	.85
Lockhart (Magnolia)	2.25
Rockdale-Minerva (Milam County)	1.25
Callihan (Live Oak-McMullen)	2.05
Webb, Jim Hogg, Zapata	1.15
*High Island	1.20

*Posted by Sun Oil Co.

*Somerset	
Below 30°	1.25
30° to 32.9°	1.35
33° to 35.9°	1.80
36° to 38.9°	1.95
39° to 41.9°	2.10
42° and above	2.25

*Posted by Grayburg Oil Co.

Eastern States

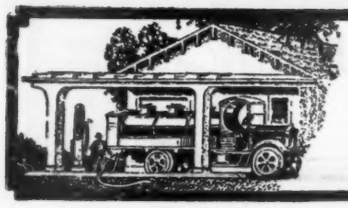
Penna Grade Oil in New York Transit Lines	3.15
Bradford District Oil in National Transit Lines	3.15
Penna Grade Oil in National Transit Lines	3.05
Penna Grade Oil in Southwest Pa. Pipe Lines	3.05
Penna Grade Oil in Eureka Pipe Line Lines	3.00
Penna Grade Oil in Buckeye Pipe Lines	2.80
Cabell Grade Oil in Eureka Pipe Line Lines	2.10
Corning Grade Oil in Buckeye Pipe Line Lines	1.60
Somerset Medium Oil in Cumberland Pipe Line Lines	2.20
Somerset Light Oil in Cumberland Pipe Line Lines	2.35
Ragland Grade Oil in Cumberland Pipe Line Lines	1.10
Gaines	2.70
Lima	1.98
Wooster	2.00
Illinois	1.84
Indiana	1.88
Princeton	1.87
Plymouth	1.40
Waterloo	1.00
Oil Springs, Canada	2.45
Petrolia, Canada	2.38
*Western Kentucky, 36° and above,	1.90
*Western Kentucky, 35° to 35.9°	1.80
*Western Kentucky 32.9° and below	1.70
Cumberland, Barren and Monroe Counties (Kentucky), (Paragon Development Co.)	2.35
*Prices for Warren, Allen, Hancock, Simpson and Ohio Counties by Indian Refining Co.	

Mexican Crude

*Tuxpam (f.o.b. Mexican ports)	1.45
†Panuco (f.o.b. Mexican ports)	1.25
Tuxpam (New York)	2.00
Panuco (New York)	1.67

*Plus 33.00c tax. †20.00c tax.

(California Crude Prices on Page 135)



TANK WAGON MARKETS

Tank wagon quotations for gasoline and kerosene in United States as furnished by the larger marketing concerns, Sept. 22

ALL TANK WAGON AND SERVICE STATION QUOTATIONS INCLUDE TAXES

STANDARD OIL CO. (INDIANA)
Main Service Station Price

	Gasoline Tank wagon	Service station	Incids tax of	Kero. Tank wagon
Chicago Dist.—				
†Less than 100 gals.	16.0	18.0	..	11.0

Tank wagon prices on April 19, 1923; g. up 1½ c; May 8, g. up 1c; June 27, both up 1c; July 19, g. down 2c; k. down 1c; Oct. 10, g. down 2c; Oct. 21, g. down 1c; Feb. 5, 1923, g. up 1c; Feb. 20, g. up 1c; Aug 14, g. down 6.6c; Oct. 4, k. down 1½c; Nov. 10, g. down 1.4c; Dec. 20, g. up 2c; Jan. 12, 1924, g. up 2c; k. up 1c; Feb. 5, g. up 2c; k. 1c; July 18, g. down 1c; July 30, g. and k. down 1c; Sept. 12, g. down 2c; Jan. 23, 1925, g. up 1c; Jan. 26, g. up 1c; Jan. 31, g. up 1c; Feb. 13, g. up 2c; k. up 1c; April 19, g. down 1c; July 14, g. up 1c; Aug. 25, g. down 2c, k. down 1c; Sept. 1, g. down 1c.

Decatur, Ill.	12.0	14.0	...	11.5
East St. Louis	15.1	17.35	...	10.6
Joliet	16.4	18.4	...	11.7
Peoria	11.0	13.0	...	11.7
Quincy	16.2	18.2	...	11.3
Davenport, Ia.	18.5	20.5	2.0	11.9
Des Moines	17.5	19.5	2.0	11.9
Keokuk	18.5	20.5	2.0	11.9
Sioux City	18.0	20.0	2.0	11.5
Duluth, Minn.	19.5	21.5	2.0	12.6
Minneapolis	17.1	19.1	2.0	12.6
La Crosse, Wis.	19.2	21.2	2.0	12.1
Milwaukee	18.1	20.1	2.0	11.3
Madison	18.3	20.3	2.0	11.5
Detroit, Mich.	18.8	20.8	2.0	12.2
Grand Rapids	18.7	20.7	2.0	12.1
Saginaw	18.9	20.9	2.0	12.3
Evansville, Ind.	19.0	20.0	3.0	11.5
Fort Wayne	19.4	21.4	3.0	11.9
Indianapolis	19.2	21.2	3.0	11.7
South Bend	19.4	21.4	3.0	11.9
Fargo, N. D.	19.9	21.9	3.0	14.6
Huron, S. D.	17.0	19.0	3.0	13.1
Sioux Falls	18.0	20.0	3.0	12.6
*K. C. Mo.	15.9	17.9	3.0	10.3
*Springfield	18.8	20.8	3.0	11.2
*St. Louis	17.6	19.9	2.5	11.0
*St. Joseph	18.0	20.0	2.5	10.9
Wichita, Kan.	10.8	12.8	2.0	10.8
Bartlesville, Ok.	17.9	19.9	3.0	9.9

*State tax is 2c. Remainder is city tax.
†Quantity price on more than 100 gallons, 15.0.

The following monthly rebate system is effective on tank wagon schedules throughout the territory of the Standard Oil Co. of Indiana: Over 750 gallons, ½ cent; over 2,000 gallons, ¾ cent; over 3,000 gallons, 1 cent; over 6,000 gallons, 1¼ cents; over 10,000 gallons, 2 cents. If quantity bought during the year is equal to 12 times the monthly agreed purchases the discount will be paid or credited on the entire quantity less monthly payments. Service station customers will receive discount of 1 cent a gallon on purchases amounting to 200 gallons a month or 2,400 gallons a year; and 2 cents a gallon on 600 gallons a month or 7,200 gallons a year.

ATLANTIC COAST DISTRICT

Standard Oil Co. (New Jersey)

	Gasoline Tank wagon	Service station	Incids tax of	Kero. Tank wagon
Newark, N. J.	15.5	17.5	..	12.75
Atlantic City	15.5	...	..	12.75
Annapolis, Md.	18.0	...	2.0	12.25
Baltimore	17.5	19.5	2.0	11.00
Cumberland	18.0	20.0	2.0	12.25
Washington	17.5	19.5	2.0	11.00
Norfolk, Va.	19.0	21.0	3.0	13.25
Petersburg	19.0	...	3.0	13.25
Danville	19.0	...	3.0	13.25
Richmond	19.0	21.0	3.0	13.25
Roanoke	19.0	21.0	3.0	13.25
Keyser, W. Va.	19.5	...	3.5	13.25
Charleston	19.0	21.0	3.5	13.25
Parkersburg	19.0	20.0	3.5	13.25
Wheeling	19.0	20.0	3.5	13.25
Charlotte, N. C.	20.0	22.0	4.0	14.25
Hickory	20.0	...	4.0	14.25
Mt. Airy	20.0	...	4.0	14.25
Salisbury	20.0	...	4.0	14.25
Charleston, S. C.	21.0	23.0	5.0	14.75
Columbia	21.0	24.0	5.0	14.75

SOUTHERN DISTRICT

Standard Oil Co. (Kentucky)

	Gasoline Tank wagon	Service station	Incids tax of	Kero. Tank wagon
Atlanta, Ga.	21.0	24.0	3.5	13.0
Augusta	22.0	25.0	3.5	14.5
Macon	22.0	25.0	3.5	13.5
Savannah	20.0	23.0	3.5	13.0
Birmingham, Ala.	19.0	22.0	2.0	14.5
Mobile	18.0	21.0	2.0	11.0
*Montgomery	20.0	23.0	3.0	15.5
Clarksdale, Miss.	19.0	22.0	3.0	12.0
Jackson	19.0	22.0	3.0	9.0
Natchez	18.5	21.5	3.0	11.5
Vicksburg	18.5	21.5	3.0	11.5
Jacksonville, Fla.	20.0	23.0	4.0	13.0
Miami	22.0	26.0	4.0	14.5
Pensacola	20.0	23.0	4.0	13.5
Tampa	20.0	23.0	4.0	13.0
Lexington, Ky.	18.0	21.0	3.0	14.0
Covington	19.0	22.0	3.0	14.0
Louisville	20.0	23.0	3.0	12.0

*In addition to the State tax of 2 cents on gasoline, Montgomery has city tax of 1 cent on gasoline and ½ cent on kerosene.

PENNSYLVANIA-DELAWARE AND PART NEW ENGLAND

Atlantic Refining Co.

	Gasoline Tank wagon	Service station	Incids tax of	Kero. Tank wagon
*Pittsburgh, Pa.	17.0	22.0	...	14.0
*Philadelphia	17.0	22.0	...	14.0
*Scranton	17.0	22.0	...	14.0
*Allentown	17.0	22.0	...	14.0
Altoona	17.0	22.0	...	14.0
*Erie	17.0	22.0	...	14.0
Dover, Del.	19.0	22.0	2.0	14.0
Wilmington	19.0	22.0	2.0	14.0
Springfield, Mass.	16.0	19.0	...	13.0
Worcester, Mass.	16.0	19.0	...	13.0
Boston	16.0	19.0	...	13.0
Providence, R. I.	17.0	20.0	1.0	13.0
Hartford, Conn.	18.0	21.0	2.0	12.0
New Haven, Conn.	18.0	21.0	2.0	13.0

*Pennsylvania tax of 2 cents is collected by the dealer and paid by him direct to the State.

SOUTHWESTERN DISTRICT

***Magnolia Petroleum Co.**

	Gasoline Tank wagon	Service station	Incids tax of	Kero. Tank wagon
Dallas, Tex.	17.0	19.0	1.0	12.0
Fort Worth	16.0	18.0	1.0	10.0
Houston	17.0	19.0	1.0	12.0
San Antonio	17.0	19.0	1.0	12.0
El Paso	18.0	21.0	1.0	13.0
Muskogee, Okla.	19.0	22.0	3.0	11 0
Oklahoma City	18.6	21.6	3.0	11.0
Tulsa	19.0	22.0	3.0	11.0
Ft. Smith, Ark.	18.0	21.0	4.0	12.0
Little Rock	16.5	19.5	4.0	10.0
Texarkana	16.0	20.0	1.0	12.0

*The following is the schedule of discounts on gasoline adopted by the Magnolia Petroleum Co. in Texas sales and the discounts are graded according to gallonage; Over 750 gallons a month, one-half cent; over 2,000 gallons, three-fourths cent; over 3,000 gallons, 1 cent; over 6,000 gallons, 1¼ cents; over 24,000 gallons a year, three-fourths cent; over 36,000 gallons a year, 1 cent; over 72,000 gallons a year, 1¼ cents; over 120,000 gallons a year, 2 cents.

The schedule on service station deliveries is: Over 200 gallons a month, 1 cent; over 600 gallons a month, 2 cents; over 2,400 gallons a year, 1 cent; over 7,200 gallons a year, 2 cents.

CENTRAL SOUTH DISTRICT

Standard Oil Co. (Louisiana)

	Gasoline Tank wagon	Service station	Incids tax of	Kero. Tank wagon
*New Orleans	17.0	20.0	3.0	10.0
Alexandria	15.5	18.5	2.0	11.0
Baton Rouge	14.5	17.5	2.0	9.5
LaFayette	15.5	18.5	2.0	10.5
Lake Charles	16.0	19.0	2.0	11.0
Shreveport	14.5	17.5	2.0	10.0
Memphis, Tenn.	16.5	16.5	3.0	12.0
Chattanooga	17.0	20.0	3.0	12.5
Knoxville	18.0	21.0	3.0	13.0
Nashville	17.0	17.0	3.0	12.5
Bristol	18.5	18.5	3.0	12.5
Little Rock, Ark.	17.0	20.0	4.0	10.0

*Tax of 3 cents includes city tax of 1 cent.

NEW YORK AND PART OF NEW ENGLAND DISTRICT

Standard Oil Co. (New York)

	Gasoline Tank wagon	Service station	Incids tax of	Kero. Tank wagon
Albany, N. Y.	16.0	...	..	13.0
*New York	17.0	...	...	13.0
Buffalo	18.0	...	..	12.0
Rochester	18.0	...	..	12.0
Syracuse	18.0	...	..	12.0
Boston, Mass.	16.0	....	....	....
Providence, R. I.	17.0	....	1.0	....
Augusta, Me.	21.0	...	3.0	13.0
Manchester, N. H.	20.0	...	3.0	13.0
Burlington, Vt.	20.0	...	3.0	13.0

*Price in steel barrels.
Note: Standard Oil Co. of New York does not generally quote service station price in its territory. In most cases the service station price is 2 or 3 cents higher than tank wagon price.

PACIFIC COAST DISTRICT

Standard Oil Co. (California)

	Gasoline Tank wagon	Service station	Incids tax of	Kero. Tank wagon
San Francisco	17.0	20.0	2.0	15.5
Los Angeles	13.5	16.5	2.0	15.5
Fresno	17.5	20.5	2.0	19.5
Reno, Nev.	22.5	25.5	4.0	19.0
Portland, Ore.	18.0	21.0	3.0	16.5
Seattle, Wash	17.0	20.0	2.0	16.5
Tacoma	17.0	20.0	2.0	16.5
Spokane	21.0	24.0	2.0	20.5
Phoenix, Ariz.	23.0	26.0	3.0	21.5

OHIO

Standard Oil Co. (Ohio)

	Gasoline Tank wagon	Service station	Incids tax of	Kero. Tank wagon
All Ohio points	19.0	21.0	3.0	13.0

ROCKY MOUNTAIN DISTRICT

Continental Oil Co.

	Gasoline Tank wagon	Service station	Incids tax of	Kero. Tank wagon
Casper, Wyo.	19.5	21.5	2.5	13.0
Cheyenne	21.0	23.0	2.5	14.5
Albuquerque, N. Mex.	23.5	26.5	3.0	16.5
Salt Lake, Utah	23.0	25.0	3.5	18.0
Denver, Colo.	19.0	21.0	2.0	14.5
Pueblo	19.0	21.0	2.0	14.5
Butte, Mont.	21.0	21.0	2.0	16.0
Helena	23.0	25.0	2.0	17.0
Boise, Idaho	24.0	26.0	3.0	20.6

NEBRASKA

Standard Oil Co. (Nebraska)

	Gasoline Tank wagon	Service station	Incids tax of	Kero. Tank wagon
Omaha	13.0	15.0	2.0	11.5
Crawford	19.0	....	2.0	12.25
McCook	19.75	21.75	2.0	13.0
Norfolk	18.75	20.75	2.0	12.0
North Platte	19.75	21.75	2.0	12.75
Scotts Bluff	19.25	21.25	2.0	12.25

TANK WAGON PRICE CHANGES

August 29—Standard Oil Co. of Kentucky reduced tank wagon and service station prices of gasoline at Covington 1 cent.

September 4—Standard Oil Co. of Indiana reduced tank wagon and service station prices of gasoline 1 cent at Decatur, Ill.

September 5—Standard Oil Co. of Indiana reduced tank wagon and service station prices of gasoline 1½ cents at Sioux Falls, S. D.

September 9—Standard Oil Co. of Kentucky reduced tank wagon and service station prices of gasoline 1 cent in Mississippi, Alabama and Florida, and 2 cents at Lexington, Ky.

September 16—Standard Oil Co. of Indiana reduced gasoline prices 2.1 cents at Minneapolis, Minn.

September 18—Standard Oil Co. of Nebraska reduced tank wagon and service station prices of gasoline at Omaha 4½ cents.

September 19—Standard Oil Co. of New Jersey reduced gasoline prices one-half cent in Maryland, Virginia, West Virginia, North Carolina and South Carolina, except at Baltimore and Washington, D. C. Kerosene was advanced one-fourth cent throughout the territory.

September 21—Standard Oil Co. of Louisiana advanced tank wagon and service station prices of gasoline one-half cent throughout Louisiana and Arkansas, except Lake Charles, Alexandria, St. Martinsville, Breauxbridge, DeQuincy and Hayes, La., where prices were advanced 1 cent, and Logansport, La., 1½ cents. Standard Oil Co. of Nebraska reduced tank wagon and service station prices of gasoline at Omaha 1 cent.

CRUDE PRICES

September 22—Standard Oil Co. of California announced new scale of prices for each California field in which it purchases crude. New schedule involves reductions in most grades as high as 49 cents. Crude of 33 degrees gravity, of Midway, Sunset, Elk Hills, Lost Hills and Belridge Fields was advanced 4 cents, and 34 degrees gravity crude in Lost Hills and Belridge was advanced 8 cents.

GULF COAST

(Continued from Page 44)

1,456 feet. The Marland Oil Co. of Texas has started No. 5 Lockwood.

In Chambers County, C. T. Rucker's No. 1 Fisher is idle. W. M. Dunman has rigged No. 1 Lawrence, 7 miles east of the Goose Creek Pool. Bradley and others' No. 2 is drilling north of Aanhuac.

In Jefferson County, the Gulf Production Co.'s No. 4 Thomas, at Fannette Dome is drilling around 1,100 feet. The Houston Oil Co.'s No. 1 Crow, at Big Hill Dome, abandoned at 2,875 feet. The Walton Oil Co.'s No. 1 is around 1,300 feet. The Yount-Lee Oil Co. is rigging for a deep test off the Spindletop Dome.

In Jackson County, the Humble Oil & Refining Co. is drilling north of Francitas. The Houston Oil Co.'s No. 1 Rodgers, west of Edna, is drilling around 2,800 feet. The Houston-Gulf Gas Co.'s No. 3 Drushell is around 2,655 feet.

In Matagorda County, the Gulf Production Co.'s No. 2 Craig, at Hawkins Dome, is drilling around 2,865 feet. The Shepherd Dome Oil Co.'s No. 2 Hawkins is at 2,200 feet and setting casing.

In Wharton County, Weed & Gayle's No. 2 Feltz is rigging at Boling Dome.

In Duval County, the United States Oil & Gas Co.'s No. 3 Peters is drilling and rigging up No. 1 Arispe, and No. 1 W. R. Peters. The Associated Oil Co.'s No. 1 Sutherland is drilling around 1,675 feet. The Humble Oil & Refining Co. is setting casing in No. 1 Pusch. O. W. Killiam's No. 2 Benavides is around 2,815 feet.

In Liberty County, the Old Colony Oil Co. is drilling No. 14 West Liberty, and the Liberty Production Co., No. 1 Seaberg.

Leasing has been active in the southern part of Jefferson County and the eastern section of Chambers County, with acreage in the south end of Liberty County being included.

The Roxana Petroleum Corp. has renewed leases on some 4,500 acres along Arenosa Creek in Victoria County. The company is said to have about 8,500 acres under lease now in that county.

In Neuces County, H. H. Givan's No. 3, near Callelen, 16 miles west of Corpus Christi, is drilling below 3,300 feet. The Yoro Oil Co.'s No. 1, located 8 miles south of Yoakum, is about 800 feet.

Down on the border in Starr County, J. R. Hadley's No. 1 Bass is drilling as is Danchy and Bryant's No. 1 Kelsey, northwest of Rio Grande City. Across the Rio Grande River in the State of Tamaulpias, Mexico, the Frontier Oil Co.'s test is reported showing some oil and gas at 600 feet. The location is 40 miles south of Rio Grande City. Another test there is fishing. These are on what is known as the Aldamas structure, extending from the northeast to the southwest. The Republic Production Co., of Houston, has 35,000 acres under lease in the State of Neuva Leon, Mexico, 12 miles south of Laredo, Tex. A series of tests will be started soon.

Miscellaneous

The United North and South Oil Co. is preparing to electrify its leases in the Luling Field. A 3,000 horsepower plant will be built. The company is drilling No. 29 Baker on the Guadalupe County side of the river.

Morgan and O'Hern's No. 2 in the Caroline-Texas district in Webb County, is a 75,000,000 gas well, getting the sand at 2,084 feet. Killiam and Chenault are starting a deep test in the Leaseholders section in the northeastern part of the county.

O. W. Killiam's No. 9 Martinez in Jim Hogg County is making 150 bbls. at 2,070 feet.

TEST WELL IN MOORE COUNTY

WICHITA FALLS, Tex., Sept. 19.—Ten thousand acres of the Joe Sneed ranch in the southeastern part of Moore County, Texas, was leased for oil and gas purposes recently by the Landreth Production Co. of Breckenridge, which contracted to start a test well by May 1, 1926. The consideration is said to have been $10,000 cash. The company's geologist made a favorable report after his survey of the tract. East, west and south of it, lease blocks are held by the Prairie Oil & Gas Co., the Sinclair Oil & Refining Co. and the Skelly Oil Co.

SINCLAIR OILS

WHETHER you want a light, free-flowing oil for a delicate machine—or a heavy, sturdy oil for a ponderous mechanical giant, you will find it in the grades of oils marketed under this Sinclair Trade Mark. You will find it in exactly the quality you require, at the right price always.

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Sinclair Oil Bldg., 45 Nassau St.
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CHICAGO
22nd and Rockwell Streets
Telephone: Crawford 2000

Cable Address: "Lucent"

SINCLAIR OILS

REG U.S. PAT OFF

A. C. BEDFORD'S DEATH COMES UNEXPECTEDLY

(Continued from Page 21)

Club of New York and of Washington, D. C., the Bankers Club, Down Town, Piping Rock and The Creek clubs and the Nassau Country Club, (New York.)

Mr. Bedford was married to Edith Kinsman Clarke of Brooklyn, and they have two sons, Alfred Clarke Bedford and Dean Bedford. The family home is in East Norwich, Long Island.

A Patriot Par Excellence

Mr. Bedford was engaged in many activities outside of his connection with the Standard Oil Co. of New Jersey, all of them prompted by the splendid public spirit he possessed. His outstanding work in this respect was his magnificent service as chairman of the Co-operative Committee on Oil of the Advisory Commission of the Council of National Defense, or as it was more popularly known, the Petroleum War Board.

On Thursday, March 22, 1917, President Woodrow Wilson sent an ambassador in the person of Bernard Baruch of New York, to the Standard Oil Co. of New Jersey to enlist its cooperation in securing for the Government and for the Allies their requirements of oil. Mr. Baruch informed A. C. Bedford, then president of Standard Oil Co. of New Jersey, that he had been told by President Wilson the United States would shortly declare war. Mr. Baruch informed Mr. Bedford that the president desired Mr. Bedford to organize a committee on oil and become its head. The following day Mr. Bedford accepted the responsibility. In a week most of the members nominated for the committee had been reached and had accepted, but formal organization was delayed until a week after the declaration of war by the United States.

Commenting on the appointment of Mr. Bedford, Isaac F. Marcosson, author of "The Black Golconda, the Romance of Petroleum," said:

"In delegating Mr. Bedford as chairman, a high compliment was worthily bestowed. A link with the old oil era, for he had been a director of the original Standard Oil Co. of New Jersey, he was likewise one of the most distinguished factors and figures in the evolution of the industry following the dissolution of the Standard Oil Trust. His career as head of our vast war petroleum activity confirmed his title as the foremost American oil statesman." * * *

The Nation's Dire Peril

"From the outbreak of the war in August, 1914, until our entrance as a participant, the production of crude oil had not kept pace with the growing consumption of the products. There had been a great increase in domestic requirements as a result of the placing here of war contracts, and the resulting general expansion of business, in addition to the normal growth due to the increase in the number of motor cars in use.

"The big problem confronting the authorities at Washington and by them delegated to the committee organized under Baruch, was to meet the heavy increase in petroleum requirements. While the expectation at that time was that this increase would be general, there was a certain pressure for an immediate addition to our supplies, particularly for the Navy. Five times as much fuel oil was consumed by the Navy on a war basis as had been taken in times of peace.

"The Allied fortunes were at a low ebb on April 6, 1917, when Congress declared war, and they continued so for some months afterwards. In this period the belief was rather widespread that neither side could win a military victory but that the struggle would end in complete exhaustion.

"On January 31, 1917, Germany had announced unrestricted submarine warfare in specified zones. In March the Russian revolution became an established fact. In the same month the retirement of the Germans to the Hindenburg lines had put 1,300 square miles of devastated territory between the German Army and any immediate danger from serious attack on the part of the Allied Army.

"There were many who thought that the entry of the United States into the war—so great were her resources in manpower and material—meant an early victory. These optimists did not realize how unprepared this country was to take immediately an active part in aiding the Allies. It is a matter of history that the world nearly suffered a German victory in May, 1918.

Situation Grows More Serious

"In the spring of 1917, dispatches had been received from Great Britain requesting greatly increased quantities of fuel oil as well as ships to carry the oil across the ocean. The situation on the other side had grown so serious that the British Government did not dare trust an explanation of the actual condition to the cables but sent representatives to Washington to put the facts before our Government. It developed then that in the absence of immediate assistance from this country, there would have to be a partial demobilization of the British fleet and a curtailment in operations of the army. Like conditions prevailed in regard to supplies of the French and Italian Governments. Drastic conservation measures had been adopted at home by these three European Governments, particularly as to the use of gasoline. Neither commercial nor passenger automobiles were allowed to operate except on urgent business.

"This situation had developed practically overnight because of the activities of the submarine. There was not only the destruction of tank steamers with their cargoes, but there were also delays resulting from the damage to vessels by mines and submarines. The breaking-up of schedules had upset all calculations as to the receipt of new supplies.

"At the same time the widening military operations had thrown out all estimates as to the use of stocks on hand. The destruction of French railroads had made it necessary to maintain the lines of communication with motor vehicles. The consumption of fuel oil by British, French and Italian fleets in patrol work made a much heavier activity, rendered useless every inventory as to the sufficiency of oil reserves, and materially increased the burden laid upon the American petroleum industry.

Meeting an Emergency

"That the American oil industry met this emergency at great sacrifice the world knows. Few realized it to a greater degree than the late Lord Northcliffe. He had come to America in June, 1917, to head the British War Mission and to coordinate the vital question of supplies for the British naval and military forces.

"As it happened, I made that trip with him on the old St. Paul of the American Line, on which I traveled so often during the war. Every day, as we lunched, dined, or walked the decks together, Northcliffe spoke of the seriousness of his task and particularly the vital importance of an adequate petroleum supply for his country. One of the first persons with whom he established contact in New York was A. C. Bedford. He laid the facts frankly before him and there was instant response.

How Bedford Met a Crisis

"In an amazingly frank letter from the United States, to the lamented Walter H. Page, who was American ambassador to Great Britain prior to our entry into the war and during the trying period that followed, Northcliffe paid high tribute to Bedford and his associates in the Standard. The particular reference, which is also an illuminating piece of unwritten war history, is as follows:

"'In great privacy let me tell you of an enormous responsibility that was placed on my shoulders one midnight, in the form of a desperate cable from A. J. B. (Mr. Balfour) as to the immediate putting of our fleet out of action owing to an apparently suddenly discovered shortage of oil. I had only been here a few days but long enough to know that such fuel is already scarce here. I knew that that cable, if discovered, would cause such a jump in the oil market as had never been known. I was up bright and early, I can assure you. A little cautious pussyfooting as to the oil situation brought no comfort—great demand, small supply, nothing doing. I read and re-read that telegram, and finally called up the Standard Oil head man.

"'We met and I gave him the cable to read, despite its 'Most Urgent, Most Secret' inscription. He read it slowly twice, gave it back to me, saying 'If it can be done, it will be done.' I said nothing whatever about price. These people started in right there, and oil is pouring across the Atlantic with giant strides, and at a lower price than we have averaged over here. They could have squeezed millions out of our trouble if they had chosen. When I thanked them, they merely remarked, 'It's our war as well as yours.' I can imagine the panic at No. 10 if they had known that I had disclosed that cable to the oil controllers'."

Followed a Great Leader

The importance of petroleum in the modern conduct of war is paramount. Without it war would revert to a period half a century back. The Naval service, air service and battlefields transportation service would be helpless, or sadly crippled. America's importance as an oil producing nation was paramount because this country produced 65 per cent of all the oil of the world, and in the course of the war even more than that, because much of the potential foreign oil was beyond the reach of the Allies.

Under the driving force of Chairman Bedford, the Petroleum War Board spread itself out into sub-committees until every field and every refining division in the country was thoroughly covered and the oil industry thoroughly "regulated" by its own representatives who were given whole-hearted cooperation by the rank and file of oil companies and oil men. Not a shadow was cast on the entire industry throughout the war. There was no charge of profiteering. There was no attempt to gouge Uncle Sam or the Allies in their extremity. The finest patriotism was exemplified by the whole industry from beginning to end of the service of the Petroleum War Board. The splendid example set by A. C. Bedford and the company of which he was the head was followed by every company and individual engaged in the oil trade.

The funeral will be held Wednesday, September 22, at 2 p. m., at Oyster Bay, Long Island. Interment will be in Greenwood Cemetery, Brooklyn.

NATIONAL PETROLEUM ASSOCIATION MEETS

(Continued from Page 22)

phasized the desirability of members using the current standard testing methods. Inter-laboratory visits by technical representatives of the members were recommended, as well as group conferences.

R. A. Wotowitch, trustee in charge, reported on the work of the Department of Insurance and Welfare and stated that 34 out of 58 companies had appointed fire marshals and were using the department's facilities. F. A. Epps, of the Tide Water Oil Co., told of the work of organizing N. P. A. fire marshals. Houston Dunn, secretary, National Petroleum Mutual Fire Insurance Co., discussed the work being done, stating that it was one of the most important moves and should occupy the attention of the whole industry. A resolution was passed, designed to provide the continuity of the movement within the association and in cooperation with the mutual company. Regular meetings of fire marshals were recommended. The harm to the industry done by publicity given oil fires was stressed in discussion.

Uniform Accounting

In his comprehensive report on the works of the Department of Economics, Accounting and Statistics, P. S. Tarbox, trustee in charge, told of the work on uniform accounting being done by the American Petroleum Institute, and said:

"Very few associations have succeeded

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"Spinners of fine cordage since 1869"

—for longer wear!

—for speedier action!

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in getting their members to adopt uniform methods of cost accounting without some well conceived plan of organization to secure the desired results.

"Your committee believes that this could best be accomplished along the lines which have worked so successfully in the traffic department and the manufacturing group, and would suggest, as soon as detailed outlines have been received from the American Petroleum Institute, that a meeting be called of the executives and accountants covering a considerable area, this to be followed by local group meetings monthly, until the details of the problems have been thoroughly understood by those interested.

"In conclusion, your committee has every confidence in the ability of the general chairman, and believe that the cost system will be made as simple and clear as possible. We suggest that the executives of the companies not thoroughly understanding the system become familiar with it, and how to interpret the results obtained. We believe that cost finding is essential, not alone as an accounting activity, but also as a practical one, assisting the executive in the managing of his business, and is a producing department, rather than a necessary overhead expense."

To Consider Marketing

The National Petroleum Association will go actively into matters relating to marketing. A resolution was adopted that the Department of Trade and Commerce look into the advisability of establishing marketing groups in the various districts which will go into the collection and dissemination of statistics and information and hold regular meetings for the discussion of marketing problems. The matter of establishment of a credit interchange bureau will also receive the attention of the department.

L. P. Litzinger, trustee in charge, reported on the activities of the Department of Trade and Commerce. He said everything possible should be done to keep Pennsylvania crudes from contamination. He declared that recent disfavor of Pennsylvania oils in European markets could be traced to contamination after the crudes had left the producers. Declaring that a sale has become a matter of cutting each other's throat, he advocated establishment of marketing groups by the association. He proposed grading of Pennsylvania oils and charged that New York combinations were crushing Pennsylvania refiners and that the entire industry was being manipulated by a monopoly operating in defiance of the Government.

Officers and Trustees

The following officers and trustees (the board of trustees being increased from 9 to 12) were elected:

Officers of the National Petroleum Association, 1925-1926: President, O. P. Keeney, first vice president, Sheldon Clark; second vice president, L. P. Litzinger; general counsel, C. D. Chamberlin; counsel, Fayette B. Dow; traffic attorney, Willis Crane; recording secretary, Herbert G. Eaton, treasurer, G. B. Hunter.

Board of Trustees: Fred G. Clark, Fred G. Clark Co.; Sheldon Clark, Sinclair Refining Co.; Frank B. Fretter, National Refining Co.; O. P. Keeney, Tide Water Oil Co.; L. P. Litzinger, Butler County Oil Refining Co.; B. B. Stroud, McKean County Refining Co.; P. S. Tarbox, Independent Refining Co.; R. A. Wotowitch, Crew Levick Co.; E. M. Lyons Tiona Refining Co.; H. A. Logan, United Refining Co.; M. R. Singleton, Paragon Refining Co.; A. C. Woodman, Crown Central Petroleum Corp.

Registration

Among those registered at the meeting were:

Bennette, Howard, western Petroleum Refiners Association.
Bennett, W. F., Valvoline Oil Co.
Blair, C. D., Levi Smith Refining Co.
Brewster, M. A., The Pennzoil Co.
Baer, J. F., Reliant Oil Corp.
Brockway, G. G. Seneca Oil Works.
Brockway, George P., Seneca Oil Works.
Browne, B. W., the Great Western Oil Co.
Conerty, P. F., Butler Refining Co.
Carruth, H. M., Canfield Oil Co.
Carruth, Louis, Canfield Oil Co.
Clark, Sheldon, Sinclair Refining Co.
Confer, A. L., Empire Oil Works.
Cowden, M. F., Pennsylvania Oil Producers Refining Co.
Crane, Willis, National Petroleum Association.
Dunn, Houston, National Petroleum Mutual Fire Insurance Co.
Dow, Fayette B., National Petroleum Association.
Eaton, Herbert G., Mutual Refining Co.
Ebbert, R. D., Rozana Petroleum Corp.
Epps, Frank A. Tide Water Oil Co.
Ewing, Herbert M., National Petroleum Mutual Fire Insurance Co.
Fanning, L. M., The Oil and Gas Journal.
Gerrodette, J. E., J. E. Gerrodette & Co.
Hawkey, T. C., Tidioute Refining Co.
Hoffman, H. C., Tiona Petroleum Co.
Hunter, G. B. Emleton Refining Co.
Hyatt, E. M., Pure Oil Co.
Keeney, O. P., Tide Water Oil Co.
Kerr, C. R., The Sloan & Zook Co.
Koch, Otto, Kendall Refining Co.
Litzinger, Lewis, Butler County Oil Refining Co.
Lowe, R. D., Elk Refining Co.
Lyons, E. M., Tiona Refining Co.
Mathis, B. H., Warren Tank Car Co.
McCafferty, W. A., Emery Manufacturing Co.
Murphy, T. M., W. H. Daugherty & Son Refining Co.
Peterson, Harry S., Seneca Oil Works.
Scott, A. W., Empire Oil Works.
Shanklin, R. M., Crew Levick Co.
Slack, Fred J., National Petroleum Fire Insurance Co.
Smiley, E. W., Superior Oil Works.
Squire, R. H., Squire Co.
Strickler, Glenn F., Sinclair Refining Co.
Stroud, B. B., McKan Co. Refining Co.
Snively, W. J. Williams Scaling Corp.
Tarbox, P. S., Independent Refining Co.
Willock, Harry H., Waverly Oil Works Co.
Winkler, A. G., Oil Trade Journal.
Woodruff, G. G., Roxana Petroleum Corp.
Worthington, S. P., Tiona Petroleum Co.
Wotowitch, Richard A., Henry F. Doherty Co., Empire Refineries.

COMPETITION KEENER ON PACIFIC COAST

LOS ANGELES, Cal., Sept. 19.—New developments in the California market during the past week show that competition is becoming even more keen for gasoline sales. The big California companies set a precedent by officially establishing a 4-cent differential to service stations and re-sellers throughout the State except in the zone about Los Angeles, where the 2-cent price cut for retail gasoline went into effect. Within this zone all the companies, with the exception of the Standard Oil Co. (California), have quietly been selling gasoline to re-sellers at 4 cents under the service station price for the most of the week. On September 18, the tank wagon price was officially set at 4 cents under the service station price for all the big companies in the Los Angeles territory, too.

This increase of 1 cent per gallon in the differential allowed re-sellers by the big companies is an added blow to the small refiners around Los Angeles. They can no longer offer the same price inducements to service station they did before the price drop. The large companies have now dropped the tank wagon price of gasoline 3 cents.

In an effort to curtail production, the large companies are shutting in wells wherever possible, but in spite of this the California production remains very high.

Gasoline consumption continues to hold up very well along the Pacific Coast. At the same time, tanker shipments are still being made to the East and Gulf Coast according to contracts not yet completed. It is estimated that

The above shows the Hogg valve, consisting of valve, valve seat and crown. Working barrel can also be supplied.

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approximately 500,000 bbls. of gasoline will be shipped during September.

Natural gasoline continues to enjoy a strong position in respect to motor gasoline. The price remains firm at 3 cents under the retail price of gasoline at service stations, with indications of going higher.

Lubricating oils are moving in good volume along with the gasoline sales through service stations.

Fuel and Diesel oils continue sluggish, as does kerosene.

TO OPPOSE GROSS PRODUCTION TAX

(Continued from Page 22)

revenue needs of local districts, cities and towns, which are supplied by ad valorem taxes, and the needs of the State Government, which relies principally upon the gross production tax.

The Supreme Court of Oklahoma has held that under the present law the gross production tax is a property tax on the oil producing properties and equipment used in and about the wells and that the present law provides adequate machinery and procedure for equalizing the oil tax rate with the ad valorem tax rate in the districts where oil is produced. And, further, that there must be no discrimination between the gross production tax rate and the ad valorem rate in those oil producing districts. This principle would be violated by the proposed measure because it proposes to include in the average daily rate the high levies of cities and towns and other non-oil producing districts. This would result in a higher tax on oil and mineral properties than if the gross production tax were repealed and the ad valorem tax applied.

The gross production tax on oil under the present law is 3 per cent or 30 mills on a 100 per cent valuation or actual selling price of the oil produced. For several years the ad valorem tax on other property has been at the average rate of from 28 to 37 mills on a 40 per cent to 60 per cent valuation. Excluding the high levies of cities and towns (where no oil producing properties are situated) the average ad valorem rate has always been less than 30 mills.

Yield $50,000,000

During the nine fiscal years the gross production tax rate has been in effect it has yielded, with practically no expense of collection, the enormous sum of $51,523,458.70. The annual return has grown from $2,399,991.88 in 1917, to $8,314,070.99 in 1925. With practically unanimity the oil producers have cooperated with the State to see the tax was efficiently collected. There has been less percentage of loss or evasion than in any other form of taxation, notwithstanding the tax is exacted on oil produced at a loss as upon oil produced at a profit.

In addition to the large amount of gross production tax paid, the oil industry also pays ad valorem taxes upon all its other property such as stored oil, tanks, pipe lines, refineries, producing equipment in warehouses, tank cars, miscellaneous material and buildings. Per dollar of value, the oil industry is paying, under existing law, a greater proportion of the total tax burden of Oklahoma than any other class of property.

Reduction Needed

There is no necessity for increased taxation of any kind in the State of Oklahoma. Curtailment rather than increase of Governmental expense is recognized everywhere as the crying need of the hour. Both President Coolidge and Governor Trapp have voiced this conclusion. Taxes must be reduced if business and the normal development of the State are to proceed. During the past 10 years the combined expenditures of the State and all its subdivisions have increased 100 per cent and the annual expenditures for all State and local Governmental purposes now approximate the stupendous figure of $100,000,000. The oil industry is a hazardous one requiring a large volume of capital to extend its operations and to safeguard against the dry-hole menace, the irregularity of income and the constantly increasing requirements of deeper drilling. The more of its capital and income is taken in the form of tax exactions the less it will have available for drilling and exploration of the untested regions of this State. The farmers and other land owners and the people generally must decide whether they want this money devoted to the development of their land and their State for oil and other minerals or that it be paid into the State Treasury to provide salaries for additional office holders and expenses of increased Governmental operations.

Out of approximately 60,000 oil wells now being operated in Oklahoma over 40,000 are old, small wells yielding, on the average, only about 1 bbl. of oil per day. These wells have not been profitable to operate during the major portion of the last five years and many have been operated at a loss in the hope of keeping them alive until better prices or improved processes of extracting oil from the sands could be obtained. Heavier taxes on oil production without making provision for these old, small wells will hasten their abandonment and the consequent economic loss to the State.

A recent report of the American Petroleum Institute to the Federal Oil Conservation Board points out there yet remains over 1,000,000,000 acres of untested but possible oil territory in the United States. Oklahoma has 41,000,000 acres of this potential reserve but the neighboring State of Kansas, where there is no gross production tax, has 52,000,000 acres of likely territory and Texas has 151,000,000 acres. Several other States offer opportunities for the oil prospector. Other things being equal the trend of oil development will be into those States which offer the most liberal legislative and tax policies affecting oil.

We producers who live in Oklahoma, who have cast our fortunes here and who own the old, small wells and hope to own future gushers desire to be permitted to continue to operate our properties and to wildcat in undeveloped regions of the State and, above all, we want to see Oklahoma continue in the forefront of oil producing States. But we submit to the Oklahoma elector that these things cannot be accomplished nor promoted by the hasty and ill-advised adoption of a tax measure so arbitrary, illogical and needless as the proposed Initiative Petition No. 89.

COASTAL LUBRICANTS CONTINUE TO BE WEAK

HOUSTON, Tex., Sept. 21. — Lub stocks from Gulf Coast crudes continue to be weak, the new schedule of quotations being ½ cent under the previous list. The market is very irregular and it is difficult to determine just what prices are on certain grades, especially on unfiltered pales and red oils.

One marketer will have a limited stock of a certain grade on hand on which he holds up the quotations. Another is carrying a surplus of the same grade and is offering it by shading quotations. Northern buyers of zero cold test stocks are slow in placing orders this year and that tends to cause a softness of the market. The foreign demand is also disappointing at this season.

Quotations on filtered stocks are more staple for the reason that only one refinery quotes on these.

DEEP PUMPS FOR BAKU

Moscow reports that the Asneft recently concluded a contract with the Government works at Ishorsk for the supply of 3,300 deep well pumps for the Baku oilfields. The total value is 1,600,000 dols., or an average value of about 500 dols. per pump.

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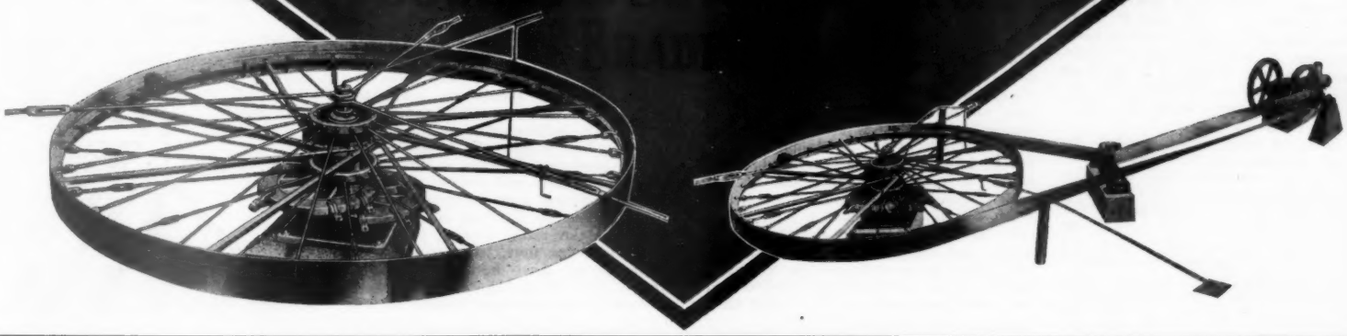

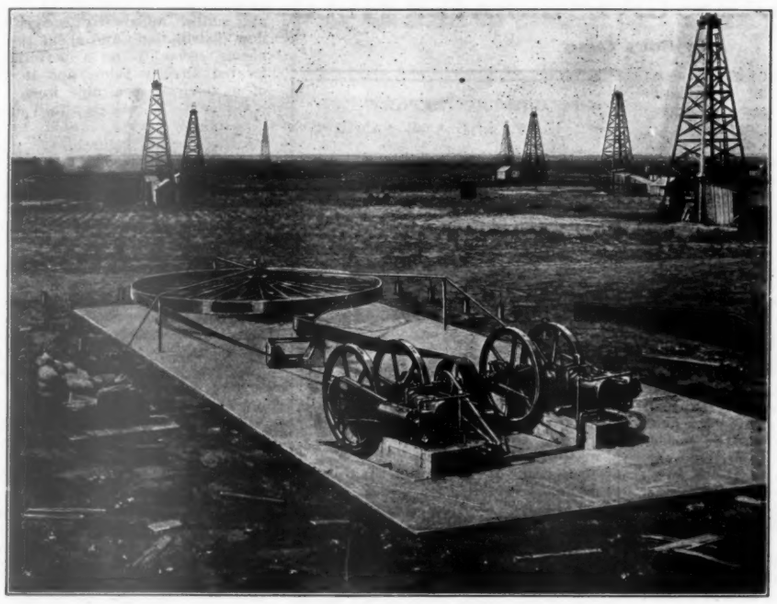

Reid Twin Engine Installation

Two Reid 40 HP. Gas Engines and a Reid Type PW All-Metal Band Wheel Power comprise the pumping plant here illustrated.

The twin engines, two forties, are connected by a shaft and two cut-off type clutches. This arrangement allows the engines to be operated independently of one another, a feature which insures practically constant service.

The power is the Reid Type PW Band Wheel Power, with 24-foot wheel, 24-inch throw eccentrics and oil pumping device with all lubricated surfaces protected by dust covers.

This plant is housed in a steel frame power house with concrete floors and has already given nearly two years' satisfactory service and promises of many more.

Write for additional information on these twin engine pumping plants

JOSEPH REID GAS ENGINE COMPANY, Oil City, Pennsylvania, U. S. A.

BRANCHES AND AGENCIES: Marietta, Ohio; Logan, Ohio; Newark, Ohio; Shreveport, La.; Charleston, W. Va.; R. B. Moore, Bolivar, N. Y.; Frick & Lindsay Co., Bradford, Penna., and Kentucky Distributors; S. R. Shoup, 708 Pacific Bldg., Los Angeles, Cal. Frick-Reid Supply Company, Tulsa, Okla., and Branches, Distributors for Oklahoma, Kansas, Texas, Arkansas and Wyoming.

BRANCH SHOP, TULSA, OKLA.

Distribution in Absorbers Important

Diameter of Plate Should Be One-Third That of Absorber. Area of Holes 75 Per Cent of Stream to Secure Maximum Efficiency

By Frank P. Peterson

SECOND DISCUSSION

The accompanying article is the second of two discussions by Mr. Peterson dealing with absorbers in natural gasoline plants. The previous article appeared in the September 10 issue of The Oil and Gas Journal. These two articles were the ninth and tenth of a series dealing with the general subject of "Rational Design of Large Natural Gasoline Plants."

As previously stated, I think unless the exception mentioned may have earned recognition of its claims, the gravity type of absorber is at present in the ranking place, all elements of profit considered. To compute capacity, we simply use the volumetric content of the shell, which is the total shell capacity minus the space occupied by filler and say 2 feet 6 inches at bottom occupied by absorbent and 3 feet 6 inches at top as separator space, leaving a net effective space of approximately 80 per cent of shell volume, for a case of an absorber 50 feet high.

If we are to respect a limit of one minute time contact, we shall have $\frac{P + 14.4}{14.4} \times 1440 \div$ daily capacity in gas volume, in which V = the net volumetric capacity of a shell, and P = the working pressure, (gauge), at which plant will operate. As to proportions of height, diameter, etc., the foregoing is based on an arbitrary selection of 50 feet as a satisfactory height limit. Also two phase contact is assumed.

As in every other detail of plant design and arrangement the condition and limitations of operation will have due and logical consideration. If rich gases, exceeding four gallons per thousand cubic feet, for instance, are to be worked, the two phase arrangement will be preferred in most cases, at least until the effectiveness of absorbers of the modified form suggested in sketches 15 and 16 shown in the September 10 issue of The Oil and Gas Journal are tried out and their results are better known. The reason for this two phasing of the work to be done in absorbers lies in the means afforded for cooling of the absorbent oil during its period of contact with the gas. And the temperature effect of the physical reaction going on in the absorber is something that cannot be greatly modified by type of equipment, unless cooling elements are built into the equipment. So far this has not been attempted. It is quite desirable to reduce height. But, if this cannot be done without serious loss of efficiency, it is a tenable assumption that a height of 50 to 60 feet may be made to operate efficiently in one phase in all cases of moderate richness of gas and this condition prevails in practically all large plants.

There are available other lines of absorber development than those suggested here. It is not the purport of these efforts to present or exploit any new ideas of either equipment for application, but rather to present in rational terms the application in present usage of such materials and assemblage as are without question acceptable.

Should Be Flexible

The large plant calls for a multiplication of absorber units. These should be so arranged that they can be extended or diminished in total capacity. Such arrangement will permit of extension or restriction of this element the same as in the case of any other major element of operating equipment, compressors, for instance.

A convenient unit size will have a capacity of from 4,000 to 8,000 cubic feet of gas daily. Manifolding for operation of absorber units should be so arranged that any unit can be cut out of operation for inspection, repairs or entire removal without disturbing operation. Provision should also be made at the dead ends of the mains supplying and receiving the gas delivered through the battery of absorbers so that extensions or additions of more absorbers may be made without disturbance to operation. This need not apply, of course, where the known facts preclude possibility of extension of plant capacity. Such provision does not require a valve of large dimensions. A pair of flanges, a stiff blind plate and a bull plug will serve. It is always possible to lower away the pressure on plant to a few pounds above atmospheric for a few minutes. On the main end side of the blind plate, a gasket of good, tough asbestos composition should be used. The main side of this gasket should have a coating of shellac when set up in the bolted joint. The other side of the gasket should be thoroughly and liberally coated with graphite and, when so properly set in, the plate can be easily and quickly removed and the joint re-bolted in a very short time without injury to the gasket. Plant arrangement practice has been so far to leave absorbers in the open. A tendency is developing also to do this in the case of accumulators, rundown or receiver tanks, gasoline pumps, etc. The writer protests this practice as uneconomical, except in cases where frosts are of rare occurrence.

Drainage

Provision for drainage and removal of water from all low points where it will settle and require to be separated from the gas, vapor, oil or gasoline with which it is associated is a prime essential detail of plant construction. It cannot be too thoroughly and carefully worked out. Absorbers come in for an important share of such consideration. Water drains are tapped into absorbers at their lowest points.

Absorber bases should be housed. Buildings of sheet metal and light steel frames are relatively inexpensive. Provision for moderate heating should be made by means of steam radiators. Water drainage should be conducted underground below frost line within the housings for absorber bases and the other details above mentioned. Safety and security of operation and sufficient increase of plant yield will be realized in the long run to more than repay the outlay in such first cost.

Each absorber unit, whether single or double phase, must be provided with sight gauge column spanning the seal level point, and the span should be not less than 18 inches above and below the surface level of absorbent to be maintained as a base seal.

Control Valves

Liquid level control valves of positive and dependable character are to be used. In Figure 15, shown in the September 10 issue of The Oil and Gas Journal, the conventional arrangement of such liquid level control valves is indicated clearly enough that it probably needs no further description. Batteries in parallel of absorbers may have a common outlet control valve. If this is done, it is best to provide liberal cross-tie connections between the bases of all the absorbers, and the distribution of oil to the units of the group must be correct. This is usually accomplished with orifice plates placed in the delivery lines to each unit.

Distribution

Distribution, that is, spread of the oil as it enters at the absorber top for its traverse through is important. Something has been suggested of the tendency to channel or flow in irregular streams through the absorber. Where fillers of even texture are well placed, it is a simple matter apparently to get good oil flow distribution; and about the simplest means seems to be a perforated plate located directly below and in the path of a vertical open pipe inlet. Such a plate serves simply to retard and deflect a portion of the stream of oil to and over its edges. The holes in the plate drop some of the oil through and to the center area of the shell and its filler material. It is difficult to set up a formula for guidance in making up such a plate spreader. Probably a practical means would be to assume a rate of oil delivery of 35 gallons per thousand cubic feet of gas to be passed through each unit and a rate of flow of 3 feet per second as it passes the spreader plate. This would mean, for a 5,000 cubic foot capacity absorber unit a requirement of 7,500 gallons per hour, or thereabouts, which is slightly more than 2.08 gallons per second. This would require an area of slightly more than 12 square inches to accommodate such a flow. Since it is not desirable to put all the oil through the plate and the frictional retardation through small holes will be greatest, a plate having small holes at its center and holes increasing in diameter in a radical direction toward the edge of the plate serves the purpose well. The Hope Engineering Co. is probably to be credited with the design and use of such a plate.

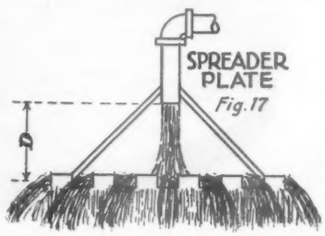

Fig. 17

The diameter of the plate may be about one-third that of the absorber it is to serve. The total area of the holes in the plate should be about 75 per cent of that of the stream computed on a basis of 3 feet per second speed of flow. The holes of the center group should be only about one-eighth inch diameter. For moderate size absorbers the holes may graduate by sixteenths outward toward the periphery of the plate and end in one-half inch holes. For large units the outside ring of holes may be as large as five-eighth inch diameter. This arrangement may be slightly

BLENDING OF LIGHT HYDROCARBONS; NEW PROCESS GIVES GREATER YIELD

By Henry Cooney

This article is concerned with the separation of iso butane and all less volatile hydrocarbons from the methane, ethene and propane accompanying them in gaseous mixtures, and to the reduction of the volatility of the blend so produced, until a product of the desired characteristics is secured. The process is applicable to either absorption or compression method gasoline plants.

Before proceeding with a description of this process a little space will be taken up in setting forth a view that the properties of the condensate recovered from a gas, will, when properly interpreted, serve as an index to the efficiency of the treatment the gas from which condensate was recovered has received. From which it follows that a set of characteristics may be established for a given gas that will indicate the maximum yield obtainable. The following properties will be considered: Boiling point, end point, recovery, specific gravity and vapor tension.

If a gas were saturated with pentane, hexane, heptane, octane and nonane under standard conditions and according to their vapor pressure, 1,000 cubic feet would contain "17.1 gallons of pentane, 5.3 gallons of hexane, 1.6 gallons of heptane, .5 gallons of octane and .3 gallons of nonane." If these vapors were all extracted, the liquid would be of a gravity about 89.1 degrees Baume; vapor tension 11.5 pounds absolute at 100 degrees Fahrenheit; boiling point about 120 degrees Fahrenheit; end point 285 degrees Fahrenheit; recovery 95 per cent.

DISTILLATION REPORT FROM TANK CAR SAMPLE

Color—W. W.
Gravity—89 Be. at 62° Fahr.
Corrected 88.6 Be at 60° Fahr.
Sample cc.—100°.
Method Distillation. B. M.
Over 74° Fahr.
5% 78° Fahr.
10% 82° Fahr.
20% 88° Fahr.
30% 94° Fahr.
40% 100° Fahr.
50% 110° Fahr.
60% 120° Fahr.
70% 138° Fahr.
80% 166° Fahr.
90% 246° Fahr.
92% Dry 330° Fahr.
Residue 1%. Loss 7%.
Bureau of Standards Hydrometers.

Butane Content

As to the butane content of a gas, Bulletin 109 of the Bureau of Mines finds in a typical casinghead gas 5.8 per cent butane and 35 per cent pentane and less volatile vapors, or as liquids 1.4 times as much butane as of all heavier fractions. Normal butane has a vapor tension of 64.45 pounds absolute at 100 degrees Fahrenheit gravity and boiling point are usually given as 103 degrees Baume and + 33.8 degrees Fahrenheit respectively. Now it will readily be seen that unless a plant is blending with distillate without any regard to a "chain of boiling points," or is employing some method of polymerizing the butanes, the quantity of these vapors entering into the finished product, must, even under ideal conditions, be limited to 25 per cent for gasoline, 35 per cent for casinghead gasoline, and 50 per cent for "extreme" blends, notwithstanding claims to the contrary.

(Continued on Page 154)

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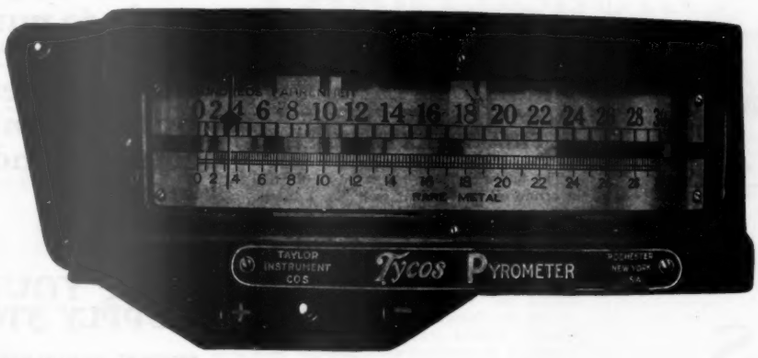

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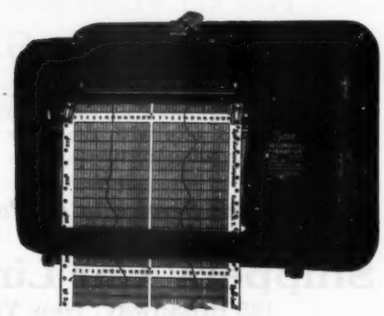

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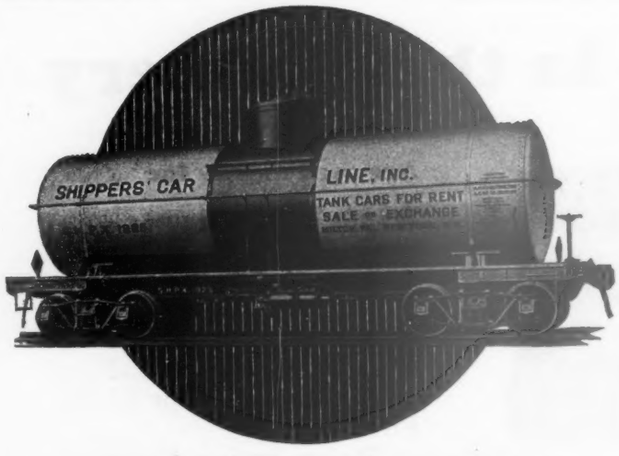

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augmented in effectiveness by serrating the outer edge of the plate, cutting diametrally inward about three-fourths inch at about 2 or 2½-inch intervals on the circumference and turning up at right angles to the face of the plate each alternate space. This will deliver a spreading stream of overflow through every gate or gap toward the shell of the absorber, and this stream by its first contact with the gas flow will be encouraged to spread in the right direction.

Spreader Plate

Sketch No. 17 illustrates the detail and its action. The plate should be located at a distance not less than 24 inches below the bottom of the outlet opening for gas at the top of the absorber, and the construction indicated suggests the use of the welder's torch and suspension of the plate by about three light (one-half inch) rods to the drop nipple of oil inlet pipe. The distance, D, should be not less than 12 inches.

Residue Scrubbers

To date, so far as the writer is advised, no adequate means has been found of stripping the gas clean of suspended absorbent oil as it leaves the absorber detail. Some oil carries over. Traps or separators, called "residue scrubbers" are, usually, and should always be provided in the main gas line leaving plant. These separators are tanks of liberal volume. They must be of steel section, sufficiently heavy to withstand plant operating pressure, as it is not desirable to lower gas pressure appreciably at plant. They should be equipped with sight gauge columns, water drainage connections, oil drainage connected to absorbent oil storage tanks, and located within easy distance to plant subject to constant inspection of operating forces. The traps should be large enough in cross sectional area of gas flow to reduce the speed of gas flow to a limit within 3 feet per second. Such area will be determined as follows, wherein;

Q = gas volume per 24 hours,

V = velocity through traps, feet per second,

$$R = \text{ratio} \frac{\text{Plant (gauge pressure} + 14.4}{14.4}$$

$$\text{Then } A = \frac{Q}{86{,}400\ V\ R} \text{ and}$$

the volumetric capacity of the traps should be something like 20 times the cross sectional unit area in feet.

Very few operators of plants have thought it worth while to provide so liberal equipment for this purpose, but the saving in consumption of absorbent oil added to the satisfaction of delivering clean, dry residue fuel makes it well worth while.

RUMANIA'S BIG FIRE FINALLY EXTINGUISHED

The fire which has destroyed $1,000,000 in crude oil at Wildcat well No. 1 in the newest extension of the Moren oil field belonging to the Romano-American Co., a subsidiary of the Standard Oil, has been extinguished after burning 50 days.

The well, which was sunk in virgin strata, had reached a depth of 1,143 meters, the deepest in Rumania, when it began a violent eruption July 24. Immediately it caught fire because the tools blown from the hole struck a spark from the iron derrick.

The violence of the flow and the terrific heat defeated all efforts to extinguish the fire until engineers had completed tunnels to the well's casing.

Saving the well is regarded as the greatest engineering feat of the kind ever performed in Rumania.

COAL DUST OIL

A credit of 2,500,000 marks has been allotted jointly by the German Government and the Prussian Government to the Evag Co. toward the cost of erecting a factory for producing oils from coal under the so-called Bergius process. This is being erected at the Wenceslaus mine in Lower Silesia. It will have a capacity for treating 200,000 tons of coal dust a year.

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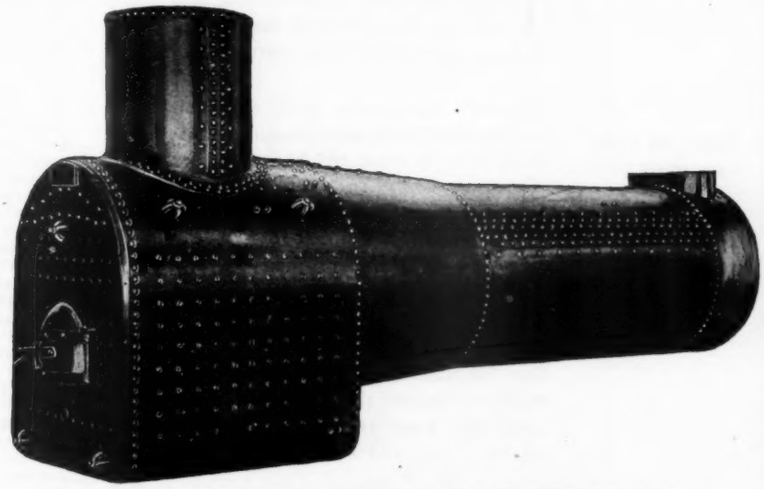

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TESTING MATERIALS COMMITTEES REPORT

(Continued from Page 90)

brought to our attention by the Executive Committee of the Standardization Committee of the Institution of Petroleum Technologists, it being pointed out that the ending "ene" is very generally applied to pure hydrocarbons. The suffix "ine" already applied to gasoline is therefore also applied to kerosine.

Crude Petroleum—A naturally occurring mixture, consisting predominantly of hydrocarbons, or of sulfur, nitrogen or oxygen derivatives of hydrocarbons, which is removed from the earth in liquid state or is capable of being so removed.

Note.—Crude petroleum is commonly accompanied by varying quantities of extraneous substances such as water, inorganic matter and gas. The removal of such extraneous substances alone does not change the status of the mixture as crude petroleum. If the removal of such extraneous substances also results in the removal of more than a trace of the naturally occurring mixture, the resulting product is no longer crude petroleum.

Topped Crude Petroleum—A residual product remaining after the removal by distillation, or other artificial means, of an appreciable quantity of the volatile components of crude petroleum.

Weathered Crude Petroleum — The product resulting from crude petroleum through loss, due to natural causes, during storage and handling, of an appreciable quantity of the more volatile components.

Benzine—This term is archaic and misleading and should not be used.

Petroleum Naphtha—A generic term applied to refined or unrefined petroleum products and liquid products of natural gas, not less than 10 per cent of which distills below 347 degrees Fahrenheit (175 degree Centigrade) and not less than 95 per cent of which distills below 464 degrees Fahrenheit (240 degrees Centigrade), when subjected to distillation in accordance with the current method of test of the American Society for Testing Materials for petroleum products of this nature.

Note—The "naphthas" used for specific purposes such as cleaning, manufacture of rubber, manufacture of paints and varnishes, etc., are made to meet specifications which may require products of considerably greater volatility than that set by the maximum limits of this generic definition.

Gasoline—A refined petroleum naphtha which by its composition is suitable for use as a carburant in internal combustion engines.

Petroleum Spirits—White Spirits—A refined petroleum distillate, with a minimum flash point of 70 degrees Fahrenheit (21 degrees Centigrade.) (Tag Closed Tester, A. S. T. M. Standard or Abel Tester) with volatility and other properties making it suitable as a thinner and solvent in paints, varnishes and similar products.

Note.—The term "turpentine substitute" as applied to petroleum spirits is to be condemned as false and misleading. The term "mineral spirits" also should not be used as it includes within its scope not only petroleum products, but other hydrocarbon mixtures, such as coal-tar distillates.

In Great Britain the term "petroleum spirits" is applied to a very light hydrocarbon mixture having a flash point below 32 degrees Fahrenheit (0 degrees Centigrade).

Kerosine—A refined petroleum distillate having a flash point not below 73 degrees Fahrenheit (23 degrees Centigrade), as determined by the Abel Tester (which is approximately equivalent to 73 degrees Fahrenheit (23 degrees Centigrade) Tag Closed Tester, A. S. T. M. method) and suitable for use as an illuminant when burned in a wick lamp.

Note.—Local ordinances at times require flash points higher than 73 degrees Fahrenheit (23 degrees Centigrade) Tag Closed Tester, A. S. T. M. Standard.

Gas Oil—A liquid petroleum distillate

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THE OIL AND GAS JOURNAL

Tulsa, Okla.

having a viscosity intermediate between that of kerosine and lubricating oil.

Note.—It should be understood that oils, other than gas oils as defined above, may be and are used in the manufacture of gas.

Fuel Oil—Any liquid or liquefiable petroleum product used for the generation of heat in a furnace or firebox, the controlling factors being cost and adaptability. Fuel oils in common use fall into one of four classes: (a) Residual fuel oils, which are topped crudes or viscous residuums obtained in refining processes; (b) Distillate fuel oils, which are distillates derived directly or indirectly from crude petroleum, (c) Crude petroleums and weathered crudes of relatively low commercial value; (d) Blended fuels, which are mixtures of two or more of the three classes.

Tar, Pitch—These terms shall not be applied to petroleum products.

Petroleum Lubricating Grease — A combination of a petroleum product and a soap or a mixture of soaps, suitable for certain types of lubrication.

Oil-Shale—A compact rock of sedimentary origin, yielding over 33 per cent of ash and containing organic matter that yields oil when destructively distilled, but not appreciably when extracted with the ordinary solvents for petroleum.

Crude Shale Oil—The oil obtained as a distillate by the destructive distillation of oil-shale.

End Point—The highest temperature reading observed on the distillation thermometer in conducting the A. S. T. M. distillation test for gasoline, etc.

Engine Distillate—A refined or unrefined petroleum distillate similar to naphtha, but often of higher distillation range.

Tops—The unrefined distillate obtained in topping a crude petroleum.

FREDRICK A. HOFFMAN DIES

Frederick Augustus Hoffman, aged 58 years, a veteran oil man and a former resident of Franklin, Pa., recently of Port Arthur, Texas, died at the home of his sister, Mrs. F. C. McGill of Sharon, Pa., recently. He was born in Pittsburgh, Pa., July 31, 1867, a son of the late Mr. and Mrs. John Hoffman of Franklin. He was a former employe of the Atlantic Refining Co. of Franklin and the Point Breeze plant of the Atlantic at Philadelphia. For 18 years he was employed by the Gulf Refining Co. at Port Arthur, Tex., being in charge of the pipe line department. He returned north four years ago due to ill health.

LEASES NEW MEXICO LAND

The New Mexico & Arizona Land Co. has executed an agreement with the Hub Oil Co. and F. A. Andrews, of Los Angeles, Cal., under which the latter secure the right to lease for drilling operations, 10,000 acres in a single block, to be selected from the land company's tract of 385,000 acres in Valencia County, New Mexico. Selection is to be made within 30 days from September 5, 1925, and drilling is to commence not later than 90 days after selection is made. Three or more wells are to be drilled. The land company is to receive as royalty one-eighth of all oil or gas produced.

RECORD CALIFORNIA LEASE

LOS ANGELES, Sept. 19.—A deal has just been closed whereby the General Petroleum Corp. will pay $600,000 to the Pacific Midway Oil Co. for the transfer of a Government lease of 40 acres adjoining a similar sized tract in Maricopa flats district, Kern County, and on which the Obispo Oil Co. brought in a 10,000-bbl. well two weeks ago. The Pacific Midway Oil Co. has a production of 10,000 bbls. of oil per month and a small topping plant. The price realized of $15,000 an acre is a record price for Kern County proven oil land.

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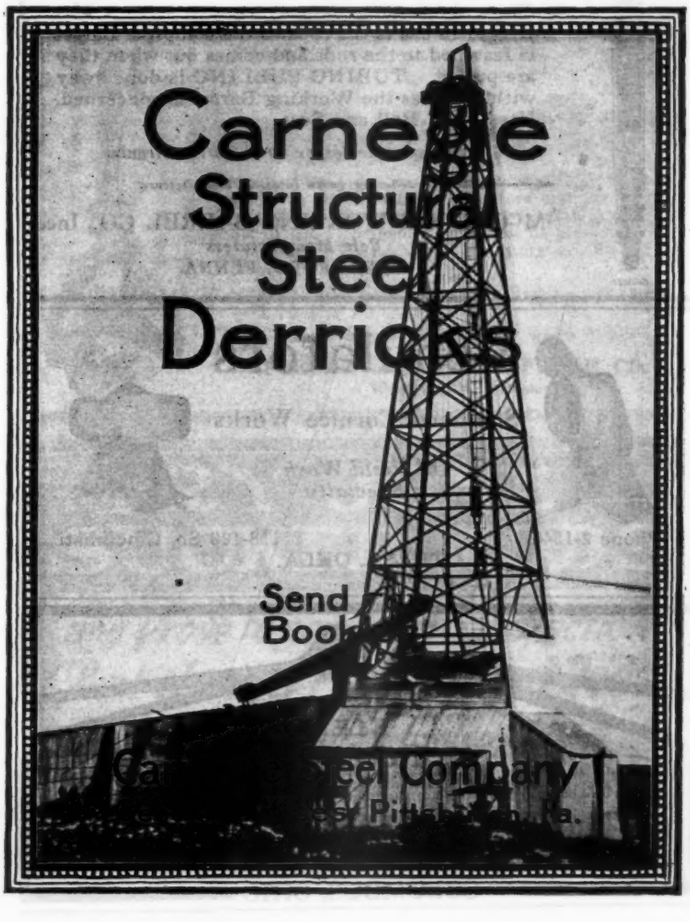

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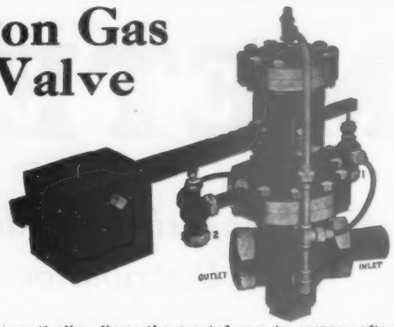

The Fulton Relief Valve automatically allows the treated gas to escape, after the compression has reached the stage at which all gasoline is removed from the gas under treatment, and permits a fresh supply of untreated gas to enter. The weights on the lever can be accurately adjusted to operate at the desired point of compression. When this point is reached the valve blows until the pressure falls to 20 or 25 pounds, or until the treated gas has escaped. By regulating the tappet screw on the lever which touches the stem of the exhaust pilot valve, the period of blowing can be shortened or lengthened as may be desired.

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COLUMBUS, OHIO

NEW PROCESS BLENDING LIGHT HYDROCARBONS

(Continued from Page 148)

A partially saturated gas containing the hydrocarbons from methane to decane, with many of their isomers, will have relatively a larger proportion of the more volatile vapors than a saturated gas. A lean gas will contain a still larger percentage of these light vapors, while some gases treated have no desirable gasoline vapors other than butane, pentane and hexane. Hence, it is believed, that gases such as are usually treated for their gasoline content should produce a condensate above 92 degrees Baume gravity, with a vapor tension of 10-pound gauge at 100 degrees Fahrenheit boiling point about 70 degrees Fahrenheit, end point 270 degrees Fahrenheit, recovery 90 per cent.

Invention Described

The invention we will now briefly describe is designed to "take over" the distillate and its attendant vapors, as they issue from the main condenser of an absorption method gasoline plant and produce therefrom a condensate of the desired characteristics. The main or primary condenser receives the vapors from the still or preliminary condenser, usually after they have passed a "knockout" box, or dephlegmators or the like.

Referring to the accompanying sketch, the apparatus as there shown for carrying out this process, consists, in its simplest form, of two compressing cylinders with their cooling coils, accumulator tanks and other appurtenances; a "weathering" tank, a receiving tank, and as a new feature, a heat exchanger or refrigerator. This exchanger is of the ordinary shell and tube type, and is shown placed horizontally. The exchanger makes a very efficient exchange of heat in this position, but where a temperature of 32 degrees Fahrenheit or lower is to be maintained on the exchanger outlet, which will necessitate the removal of as much moisture as possible, a vertical exchanger may be preferable.

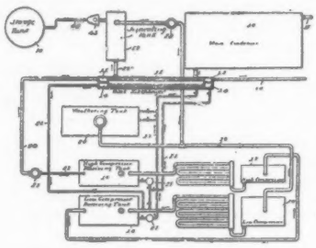

Diagram of process for the blending of light hydrocarbons.

Beginning with the exchanger the operations will be as follows in an absorption method plant using a low pressure still: The liquid distillate with its attendant vapors, also some water and water vapor, all from the main condenser pass through the exchanger. The gasoline and water en route to the separating tank and the vapors to the compressors. These vapors are saturated being in contact with the gasoline just condensed from them by a temperature change. With a temperature of 40 degrees Fahrenheit and a pressure of 2-pound gauge on the exchanger, these vapors may carry 20 gallons of desirable gasoline per 1,000 cubic feet.

From the Exchanger

From the exchanger the vapors go to the low compressor, they are compressed to about 45-pound gauge pressure, then passed through the cooling coils to the "low" compressor receiving tank, 18. At 70 degrees Fahrenheit the liquid condensed by this first stage compression, may have, for example, the composition by volume of 30 degrees pentane and less volatile fractions, 53 per cent butane and 17 per cent propane and lighter vapors or gases.

The vapors from the "low" compressor receiving tank are conducted to the "high" compressor, compressed to 120-pound gauge pressure and cooled to about 80 degrees Fahrenheit. The liquid in this high compressor receiving tank, 16, produced by this operation may, for example, be 7.5 per cent pentane and less

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volatile bodies, 64.5 per cent butanes and 28.5 per cent propane and lighter vapors, or gases. The vapors that are not condensed by the high compressor may be expanded through compartment 15 of the exchanger, if no other treatment is thought necessary.

The second stage condensate from tank 16, is discharged through the tubes of its compartment, 14, of the exchanger, cooling the vapors surrounding the tubes of its compartment into the low compressor receiving tank, 18. Since the pressure on tank 18 is less than that carried on tank 16, a part of the second stage condensate is vaporized and returns to the intake of the "high" compressor, thence through the cooling coils to tank 16, then to the exchange compartment, 14, and to tank 18 as before, making a typical refrigerating cycle. The quantity of condensate to be used as a refrigerant may be varied within wide limits by changing the pressures and temperatures of tanks 16 and 18. Now the liquid in tank 16 is a fraction condensed from the vapors of tank 18, hence returning this fraction to tank 18, enriches rather than dilutes the gasoline content of its vapors.

The liquid in tank 18, enriched by the second stage condensate, as just stated above, and with its temperature materially reduced, is expanded into the body or shell of the exchanger blending direct with the distillate and vapors from the main condenser. Or this liquid from tank 18 may be conducted to weathering tank 20, to reduce the quantity of propane or butane or both, then to the exchanger. This "weathering tank," 20, is designed to reduce to "wildness" of the liquid by a pressure drop only. The vapors from the weathering tank are returned to the intake of the "low" compressor.

It has been shown above that the vapors passing through the exchanger from the main condenser are saturated; hence the desirable fractions expanded into the shell of the exchanger from tank 18 or tank 20, are not absorbed by the vapors.

From the exchanger the condensate goes to separating tank 29, where the water is removed, then to tank 30, marked storage on the sketch. Here the temperature of the liquid is raised to 60 to 80 degrees Fahrenheit by agitating with water. From tank 30, the gasoline is pumped to storage. Vapor from tank 30 are returned to the first stage compressor.

The process is what may be termed a closed circuit. No vapors leaving the system, unless absorbed by the gasoline, until rejected by the high compressor.

Claims Advanced

Gasoline of the following characteristics can be produced by this method. Gravity Baume above 88 degrees. Vapor tension 10 pounds or under at 100 degrees Fahrenheit. Initial over above 70 degrees Fahrenheit. Recovery above 90 per cent.

In many plants the refrigerating features will effect a considerable saving in water expenses for condensers, etc., or will make it practical to maintain a reasonably low temperature on coils and condensers where water temperatures are high.

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It will increase the yield. The amount of the increase will depend on the gravity and other properties of the gasoline produced. A plant producing gasoline of a gravity of 80 degrees Baume may not by securing one-half of the marketable vapors in the gas.

The process is covered by Patent No. 1,543,750, issued to writer June 30, 1925.

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AMARILLO, Tex., Sept. 19.—A second trainload of Amarillo gasoline is being shipped from here destined to the Louisiana refinery of the Sinclair Refining Co. at Westwego, La., where it will be exported.

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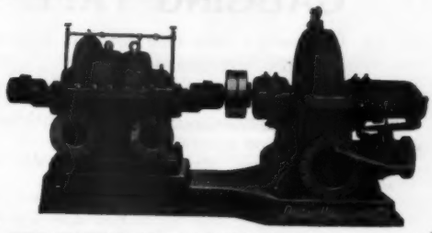
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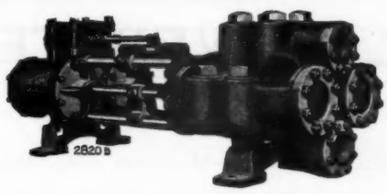
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Mexican Shipments During August Show Decrease From July

By George Blardone

TAMPICO, Mexico, Sept. 18.—Sharp decline of the August vessel movement of petroleum from Mexican ports of primary clearance compared with the July movement can be noted in the subjoined detailed shipping tables. The August movement totaled only 6,546,343 bbls., a decrease from the July movement of 701,067 bbls., and, further, a decrease from the July, 1924, movement of 3,452,349 bbls.

The largest loss during the August movement was registered by Huasteca Petroleum Co., (Pan American Eastern), whose shipments declined around 1,000,000 bbls. This loss is an anomaly, however, for both Huasteca Petroleum Co., and the other Pan American Eastern subsidiary, Mexican Petroleum Co.-Ebano, the former producing in the light oil district and the latter in the heavy oil district, are the only two producing units that have some actual production in reserve. All other companies, where transport is available, are producing to the limit of their capacity. Actual daily production at this time can be placed, in round figures at say 200,000 bbls. the day in the northern fields and say, 80,000 bbls. the day in the south fields, a general total of 8,400,000 bbls. the month.

It will also be noted in the division of movement for the month of August that both the United Kingdom and the Continent are conspicuous by their absence. However, as pointed out last month, the Royal Dutch Shell interests are clearing some cargoes for Key West which undoubtedly is "for orders," and while de jure, this is for the United States, de facto, some of this oil may, in the end, be ordered across.

The heavier oils in the subjoined figures total 4,481,506 bbls., the remainder belonging to the light oil division.

The movement in detail follows:

FROM TAMPICO

By Transcontinental Petroleum Co.

Aug.	Rig	Vessel	Destination	Bbls.
1	Ss	Mary Luckenbach,	Port Tampa	47,913
2	Ss	Pioneer,	Mariel, Cuba	48,261
3	Ss	Ardmore,	Charleston	59,344
3	Ss	S. B. Hunt,	Baton Rouge	73,501
4	Ss	Dora C.,	Antilla & Havana	49,988
4	Ss	Princeton,	Baytown	50,582
6	Ss	Clement Smith,	New York	53,338
6	Ss	L. J. Drake,	Jacksonville	59,276
7	Ss	Sunbeam,	Panama	*68,527
8	Ss	Muskogee,	New York	65,778
8	Ss	Cape Ann,	Baltimore	68,748
10	Ss	Mary Luckenbach,	Port Tampa	48,024
11	Ss	Glenpool,	Charleston	*58,279
12	Ss	Pioneer,	Key West	48,641
13	Ss	Cape Cod,	Baltimore	68,497
15	Ss	W. A. Reidemann,	New York	99,578
19	Ss	Princeton,	Baytown	51,685
19	Ss	Durango,	Baltimore	66,950
19	Ss	F-Sulphur 1,	La Romana, D. R. m.	16,647
20	Ss	Vaarli,	Maurer, N. J.	58,037
20	Ss	Dora C.	Jacksonville	45,685
21	Ss	Dungannon,	Philadelphia	67,851
23	Ss	Pioneer,	Baytown	51,253
25	Ss	Princeton,	Baton Rouge	48,943
25	Ss	Albertolite,	Montreal	79,408
26	Ss	Ardmore,	New York	73,862
26	Ss	Clement Smith,	Baltimore	71,994
27	Ss	Eurana,	Baton Rouge	62,623
28	Ss	Cape Ann,	New York	66,182
29	Ss	Willwyn,	Baltimore	66,533
		Bunker deliveries		85,764
		Total		1,881,692

By Huasteca Petroleum Co.
(Pan American Eastern)

Aug.	Rig	Vessel	Destination	Bbls.
1	Ss	Meline,	New York	*63,833
2	Ss	Mendocino,	Providence	*64,673
4	Ss	Cerro Azul,	Santos	*79,020
4	Ss	Mantilla,	New York	*52,233
4	Ss	Norman Bridge,	Jacksonville	*41,241
4	Ss	Mirlo,	Galveston	*68,410
6	Ss	San Valerio,	Key West f.o.	*58,564
6	Ss	J. O. Boyd,	New Orleans	†18,848
7	Ss	E. L. Doheny, Jr.,	New York	*78,376
7	Ss	H. G. Wylie,	Tampa	*42,289
8	Ss	C. A. Canfield,	Providence	*60,348
9	Ss	Crudeoil,	Miami	*14,230
10	Ss	Fred. Ewing,	New Orleans	68,108
11	Ss	Fueloil,	Miami	*14,392
12	Ss	Montana,	Panama	*63,961
12	Ss	Mexoil,	Miami	*14,914
14	Ss	Mirlo,	Philadelphia	64,109
18	Ss	Dean Emery,	Montevideo & Beunos Aires	*66,366
20	Ss	H. G. Wylie,	Houston	*42,053
20	Ss	Crudeoil,	Miami	*14,109
23	Ss	Meline,	Galveston	*67,480
23	Ss	Gymeric,	New Orleans	†74,561
26	Ss	Mendocino,	New York	*64,469
26	Ss	H. G. Wylie,	Providence	*41,596
28	Ss	Montana,	New York	*63,759

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30	Ss	Meline, Galveston		*65,666
31	Ss	San Zotico, Havana		*55,432
31	Ss	Crudeoil, Miami		*14,283
		Bunker deliveries		87,360
		Total		1,524,683

By Mexican Eagle Oil Co., Ltd.

Aug.	Rig	Vessel	Destination	Bbls.
1	Ss	San Gerardo, Key West f.o.		*87,453
10	Ss	San Zotico, Key West f.o.		*63,267
11	Ss	Corning, New Orleans		* 5,781
13	Ss	Shastine Maersk, Brazil ports		†23,020
14	Ss	San Florentino, Santos & Rio Jan. m.		*87,287
17	Ss	San Fernando, Key West		*90,697
21	Ss	San Leonardo, Key West		*47,487
25	Ss	San Leopoldo, Rio Janeiro		†26,634
25	Ss	San Leopoldo, Pernambuco		*26,955
27	Ss	San Macedonio, Nassau, British Isles		*38,803
28	Ss	San Zeferino, Key West f.o.		*64,528
		Coastwise		†80,525
		Coastwise		*143,978
		Coastwise		41,420
		Bunker deliveries		68,499
		Total		886,324

By Mexican Sinclair Pet. Corp.

Aug.	Rig	Vessel	Destination	Bbls.
1	Ss	Gene Crawley, Bocas del Toro, C. A.		29,248
2	Ss	Madrono, Havana & Matanzas		53,998
4	Ss	W. L. Connelly, New Orleans		30,337
5	Ss	E. W. Sinclair, Nuevitas		43,390
13	Ss	Madrono Matanzas		55,972
13	Ss	W. L. Connelly, New Orleans		30,526
13	Ss	Harry Farnum, Cienfuegos		30,781
18	Ss	E. W. Sinclair, New Orleans		43,112
19	Ss	Gene Crawley, Cienfuegos		30,072
21	Ss	Mirita, New Orleans		56,108
24	Ss	Madrono, Havana		56,512
25	Ss	E. W. Sinclair, New Orleans		42,092
28	Ss	W. L. Connelly Nuevitas		30,536
29	Ss	J. F. Farrell, New Orleans		69,364
30	Ss	Mirita, Cienfuegos		54,301
31	Ss	Gene Crawley, New Orleans		29,218
		Bunker deliveries		24,162
		Total		709,729

Cia. Mexicana Holandesa La Corona, S. A.
(Royal Dutch-Shell)

Aug.	Rig	Vessel	Destination	Bbls.
5	Ss	Sabine Sun, Boston		66,619
10	Ss	San Fraterno, Key West f.o.		45,587
10	Ss	San Fraterno, Key West f.o.		*44,518
11	Ss	Antietam, New York		65,443
11	Ss	Corning, New Orleans		41,394
15	Ss	San Tirso, Key West f.o.		*58,720
17	Ss	Torres, Guantanamo, Cuba		46,328
23	Ss	Corning, New Orleans		46,553
26	Ss	El Oso, Key West		39,703
26	Ss	El Oso, Key West		*21,336
27	Ss	Bidwell, Boston		67,341
		Bunker deliveries		40,618
		Total		582,260

By East Coast Oil Co.

Aug.	Rig	Vessel	Destination	Bbls.
2	Ss	F-Sulphur 6, Freeport		27,243
4	Ss	F-Sulphur 1, Freeport		18,992
9	Ss	F-Sulphur 1, Freeport		17,683
10	Ss	Tamiahua, Galveston		71,792
12	Ss	F-Sulphur 6, Freeport		27,384
14	Ss	F-Sulphur 1, Freeport		18,255
17	Ss	Tamiahua, New Orleans		77,476
18	Ss	F-Sulphur 6, Freeport		27,406
23	Ss	F-Sulphur 6, Freeport		27,407
27	Ss	F-Sulphur, Freeport		26,868
27	Ss	Tamiahua, Galveston		77,866
30	Ss	Caloria, New Orleans		10,261
		Bunker deliveries		4,162
		Total		432,795

By Mexican Gulf Oil Co.

Aug.	Rig	Vessel	Destination	Bbls.
19	Ss	Caloria, Puerto Padre, Cuba		40,613
20	Ss	Agwibay, Brunswick		69,389
		Total		110,002

By Panuco Boston Oil Co.

Aug.	Rig	Vessel	Destination	Bbls.
4	Ss	Agwiworld, Philadelphia		69,648
21	Ss	Agwibay, Brunswick		7,915
		Total		77,563

By Mexican Oil Exporters Corp.

Aug.	Rig	Vessel	Destination	Bbls.
22	Ss	W. M. Isom, Baltimore		26,953
26	Ss	Nelson, Baltimore		36,353
		Bunker deliveries		7,214
		Total		70,520

By The Texas Co.

Aug.	Rig	Vessel	Destination	Bbls.
29	Ss	Georgia, Norfolk		6,538
29	Ss	Georgia, Norfolk		38,648
		Bunker deliveries		3,084
		Total		48,270

FROM PORT LOBOS
By Transcontinental Pet. Co.

Aug.	Rig	Vessel	Destination	Bbls.
1	Ss	Mevania, New York		74,398
5	Ss	Ardmore, Charleston		19,331
7	Ss	Clement Smith, New York		18,887
		Total		112,616

FROM TUXPAM
By Mexican Eagle Oil Co., Ltd.

Aug.	Rig	Vessel	Destination	Bbls.
3	Ss	San Gerardo, Key West f.o.		*20,913
11	Ss	San Fraterno, Key West f.o.		* 5,418
15	Ss	San Florentino, Rio Janeiro		*22,878
18	Ss	San Fernando, Key West f.o.		*23,243
		Coastwise		23,684
		Bunker deliveries		13,753
		Total		109,889

AUGUST SUMMARY

From Tampico	6,323,838
Port Lobos	112,616
Tuxpam	109,889
Total August, 1925	6,546,343
Total August, 1924	9,998,692
Decrease August, 1925	3,452,349

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Canada	79,408
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Bunkers (to balance)	334,616
Total	6,546,343

CLASSES

Crudes	3,767,736
Topped Crudes	2,162,124
Distillates	281,867
Bunkers (to balance)	334,616
Total	6,546,343

(*Denotes topped crudes; †denotes distillates).

Testing the Edges of Kevin-Sunburst Field And Outlying Areas

SHELBY, Mont., Sept. 19.—The success of the Fulton Oil Co. on its Byrne lease, NE NW Section 31-35-1w, Kevin-Sunburst Field, Toole County, which has been producing 1,500 bbls. a day from three wells, makes the territory just west of it look very good. There have been no wells drilled offsetting the west side of this lease, and while it is hazardous to prophesy what may be found just beyond it because of the general in and out character of the producing sand, it is believed that the pay should extend a quarter of a mile westerly at least. All the rest of the big wells completed in that area have stopped flowing to the extent that tubing and rods have had to be run and the wells agitated now and then.

The production of the field is considerably over 10,000 bbls. a day and should not drop much below that figure until the winter sets in.

A number of interesting outside tests have been started recently the success of which would mean much to northern Montana. The O'Neil Brothers' No. 1 Conrod, SW SE SE Section 30-35-1w, was nearing completion when this was written. It is a good test of the south end of the field. The St. Paul Montana Oil Co.'s No. 1 Cox, NE NW SW Section 34-33-2w, is rigged up ready to go. This location is 3 miles north of Shelby and 4 miles south of the O'Neil Brothers' test. A test is promised on Township 33-3w this fall and two tests are planned for the east side of the field, one in Township 34-1e and the other in Township 33-1e, about 6 miles apart. The exact locations of these tests have not been given out.

Outside the recognized Kevin-Sunburst area several wildcat tests have been spudded in. One of these is in Section 18-7-30n-3e. It is down below 900 feet. It found gas in the Colorado shale at about 700 feet, but at 840 feet got water, which rendered the gas useless as fuel. It is near the Marias River and about 40 miles from Shelby. The Red Top Oil Co. has spudded in its Sweetgrass Hills test, Section 13-36-3e, about 5 miles south of the Gladys Belle Oil Co. No. 1 Brown, which had 15,000,000 feet of gas, but which got sulphur water in the Ellis sand. The area around the Sweetgrass Hills has received a lot of attention lately, one company having leased a whole township which may be given at least one test this fall. If production is found around the Hills it is expected that it will be greater than that found in the same sand (Ellis) in the Kevin-Sunburst Field as the sand is thicker and higher structurally. Some of the wells started may be finished before the cold weather sets in. There are now 358 producing wells in the Kevin-Sunburst Field, according to the records of the Northern Oil Information Bureau; 21 producing gas wells, 165 abandoned wells on structure; 35 dry holes off structure; 40 drilling wells, and 30 rigs up.

LAGO PETROLEUM

James Currie has concluded certain details in London regarding Lago petroleum. It is understood a new company will be formed to take over the present Lago Petroleum Co. and Lago Oil & Transport. Pan American Petroleum & Transport will have control of the new Lago company. Lago Petroleum Co. has completed La Rosa No. 29 with initial flow of 6,000 bbls. of oil a day.

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Oxweld Acetylene Co.

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Fittings—Steel—
Dayton Pipe Coupling Co.
Kelly & Jones Co.
Ohio Steel Foundry Co.
Pittsburgh Reinforced Brazing & Machine Co.

Flanges—Brass, Iron and Steel—
Kelly & Jones Co.
Metric Metal Works

Flange Unions—
Gaso Pump & Burner Mfg. Co

Flashlights—
Delta Electric Co.
National Carbon Co.

Floating Roofs and Decks—
Chicago Bridge & Iron Works
Columbian Steel Tank Co.

Floodlights—
Pyle-National Co.

Floor Circle Braces (See Braces)

Force Feed Lubricators (See Lubricators)—

Forging Billets—
Harrisburg Pipe & Pipe Bending Co.
Heppenstall Forge & Knife Co.

Forgings—
Champion Machine & Forging Co.

Friction Clutch Pulleys (See Pulleys)—

Fuel Oil (See Oil—Fuel)—

G

Gas and Oil Gate Valves (See Valves)—

Gas Compressors (See Compressors—Gas)—

Gas Engines (See Engines—Gas)

Gas Holders—
Chicago Bridge & Iron Works

Gaskets—
Garlock Packing Co.
McCord Radiator & Mfg. Co.

Gas Masks & Safety Appliances—
Mine Safety Appliance Co.

Gas Meters (See Meters)—

Gas Oil (See Oil—Gas)—

Gasoline—
Empire Refineries, Inc.
Gulf Refining Co.
Magnolia Petroleum Co.
Pure Oil Co.
Sinclair Refining Co.

Gasoline—Natural—
Chestnut & Smith Corp.

Gasoline Plant Equipment—
Bessemer Gas Engine Co.
Chicago Bridge & Iron Works
Clark Brothers Co.
Gaso Pump & Burner Mfg. Co.
Kellogg, M. W. Co.
Newton Process Mfg. Co.

Gas Regulator Casinghead—
Davis Regulator Co.

Gas Regulators—
Chaplin Fulton Mfg. Co.
Davis Regulator Co.
Fisher Governor Co.
Metric Metal Works
Smith Separator Co.

Gas Scrubbers—
Newton Process Mfg. Co.

Gauge Poles—
Marsh Gauge Pole Co.

Gauges—Automatic Tank—
Oil Conservation Engineering Co.

Gauges—Pressure and Vacuum—
Bristol Co.
Foxboro Co., Inc.
Metric Metal Works

Gauges—Test—
Metric Metal Works

Gear Driven Pumps (See Pumps)

Gears—Cut—
Nuttall, R. D. & Co.

Gears—Reduction—
Nuttall, R. D. & Co.

Generators—
Westinghouse Electric & Mfg. Co.

Generators—Acetylene—
Oxweld Acetylene Co.

Generators—Steam—
Baker Motors, Inc.

Generators—Turbine—
Pyle-National Co.
Westinghouse Electric & Mfg. Co.

Glass Bottles (See Bottles, Glass)

Glassware—Chemical for Laboratory Use—
Illinois Glass Co.

Governors—
Gardner Governor Co.

Governors—Boiler Feed—
Chaplin-Fulton Mfg. Co.
Fisher Governor Co., Inc.

Grey Iron Castings (See Castings)

H

Hammers—Chipping and Calking Pneumatic—
Chicago Pneumatic Tool Co.

Hammers—Riveting Pneumatic—
Chicago Pneumatic Tool Co.

Hangers—Iron and Steel—
Dodge Mfg. Corp.

Hatches—Gauge and Thief—
Oil Conversation Engineering Co.

Heat Exchangers—
Carbondale Machine Co.
Griscom-Russell Co.
Hope Engineering & Supply Co.
Newton Process Mfg. Co.

Heat Interchangers—Fluid—
Braun, C. F. & Co.

Heat Treatment for Cleaning Out Flow Lines, Tanks, Etc.—
Berwald Chemical Co.

High Pressure Gate Valves (See Valves)—

Hoists—Pneumatic, Geared and Universal—
Chicago Pneumatic Tool Co.
Yale and Towne Mfg. Co.

Hoists—Portable—
Wright Mfg. Co.
Yale & Towne Mfg. Co.

Hose—
Fenwick-Reddaway Mfg. Co.

Hose—Drillers—
Goodrich, B. F., Rubber Co.

Hose—Oil Suction and Discharge
Goodrich, B. F., Rubber Co.

Hose—Rubber—
Goodyear Tire & Rubber Co.

Hot Rolled Strip Steel (See Steel)

Hydraulic Gate Valves (See Valves)—

Hydraulic Jacks (See Jacks)—

I

Insulation Materials—
Celite Products Co.
Johns-Manville, Inc.

Insurance—Fire—
Oil Insurance Ass'n.

Insurance—Tornado—
Oil Insurance Ass'n.

J

Jacks—Hydraulic—
Bridgeport Machine Co.

Jacks—Lifting—
Templeton, Kenly & Co., Ltd.

Jacks—Pumping—
American Well Works
Bessemer Gas Engine Co.
Braden Co.
Frick-Reid Supply Co.
Jones, S. M. Co.
Kansas City Hay Press Co.
Spang & Co.

Jars—
Bridgeport Machine Co.
Spang & Co.

Jar Steel—
Heppenstall Forge & Knife Co.

K

Kerosene—
Acme Petroleum Co.
Empire Refineries, Inc.
Gulf Refining Co.
Magnolia Petroleum Co.
Pure Oil Co.

L

Lacquers—
Sherwin-Williams Co.

Lanterns—Electric—
Delta Electric Co.

Lanterns—Hand—
Delta Electric Co.

Lead and Mixed Metal Products
Eagle Picher Lead Co.

Lead in Oil—
Eagle Picher Lead Co.
National Lead Co.

Lead Wool and Containers—
Eagle Picher Lead Co.

Lifting Jacks (See Jacks)—

Lighting Equipment—
Climax Engineering Co.
Pyle-National Co.
Westinghouse Electric & Mfg. Co.

Liquid Level Controls (See Controllers)—

Litharge—
Eagle Picher Lead Co.
National Lead Co.

Loaders—Trucks—
Barber-Greene Co.

Long Distance Telephone—
American Telephone & Telegraph Co.

Lubricating Devices—
McCord Radiator & Mfg. Co.

Lubricating Oils (See Oils)—

Lubricators—
Ajax Iron Works

Lubricators—Force Feed—
Manzel Brothers Co.
McCord Radiator & Mfg. Co.

M

Machine Tools—
Ryerson, Jos. T., & Sons, Inc.

Manholes—Tank—
Oil Conservation Engineering Co.

Manifolds—
Reid, Joseph, Gas Engine Co.

Metal Buildings Sectional (All Types) (See Buildings)—

Meters—Gas—
Foxboro Co., Inc.
Metric Metal Works
Pittsburgh Meter Co.
Roots, P. H. & F. M. Co.
Westcott & Greis

Meters—Gasoline—
Pittsburgh Meter Co.

Meters—Oil—
Pittsburgh Meter Co.

Molded Goods—Rubber—
Goodyear Tire & Rubber Co.

Motor Controlled Apparatus (See Apparatus—Motor Control)—

Motors—Electric—
Fairbanks-Morse & Co.
Westinghouse Electric & Mfg. Co.

Motors—Gasoline (See Engines—Gasoline)—

Motors Trucks (See Trucks)—

N

Naphtha—
Pure Oil Co.

Natural Gasoline (See Gasoline—Natural)—

Natural Gasoline Plant Equipment
American Tank Co.
Chaplin-Fulton Mfg. Co.
Continental Supply Co.
Cooper, C. & G. Co.
Griscom-Russell Co.
Roots, P. H. & F. M. Co.
Smith Separator Co.
Westcott & Greis

Nitrogen—
Linde Air Products Co.

O

Oil and Gas Pipe Line Construction—
Hope Engineering & Supply Co.

Oil Burners (See Burners—Oil)—

Oil Engines, Semi-Diesel (See Engines—Semi-Diesel Oil)—

Oil Field Equipment—
Baash-Ross Tool Co.
Baker Casing Shoe Co.
Bridgeport Machine Co.
Continental Supply Co.
Cunningham Co.
Gaso Pump & Burner Mfg. Co.
International Derrick & Equipment Co.
Iron King Mfg. Co.
Kaw Boiler Works Co.
National Supply Co.
Parkersburg Machine Co.
Parkersburg Rig & Reel Co.
Reed Roller Bit Co.
Regan Forge & Engineering Co.
Reid, Joseph, Gas Engine Co.
Republic Supply Co.
Trumble Gas Trap Co.

Oil Filters—
Burt Mfg. Co.

Oil—Fuel—
Acme Petroleum Co.
Empire Refineries, Inc.
Gulf Refining Co.
Magnolia Petroleum Co.
Pure Oil Co.
Sinclair Refining Co.
The Texas Co.

Oil—Gas—
Acme Petroleum Co.
Gulf Refining Co.
Pure Oil Co.
Sinclair Refining Co.
The Texas Co.

Oil—Lubricating—
Barnsdall Refining Co.
Empire Refineries, Inc.
Gulf Refining Co.
Magnolia Petroleum Co.
Pennzoil Co.
Pure Oil Co.
Sinclair Refining Co.
The Texas Co.

Oil—Tractor—
Barnsdall Refining Co.
Gulf Refining Co.
Pennzoil Co.
Pure Oil Co.

Oiling Devices—
Lunkenheimer Co.

Oil Meters (See Meters)—

Oil Piping Equipment (See Fittings)—

Oil Reclaiming Process—
Barnickel, Wm. S. & Co.
Houston Pump & Supply Co.

Oil Refinery Equipment (See Refinery Equipment)—

Oil Savers—
Arbon, Paul, & Co.
Oil Well Improvements Co.

Oil Securities (See Securities)—

Oil Suction and Discharge Hose (See Hose)—

Oil Testing Instruments—
Tagliabue, C. J., Mfg. Co.

Oil Well Cementing—
Halliburton, Erle P.

Oil Well Screens (See Screens)—

Oil Well Tools—
Dunn Mfg. Co.
Hinderliter Tool Co.
Reed Roller Bit Co.
Star Drilling Machine Co.
Titusville Forge Co.
U. S. Tool Co.

Over Shots—
Reed Roller Bit Co.
Regan Forge & Engineering Co.

Oxygen—
Linde Air Products Co.

P

Packer Release—
Acme Fishing Tool Co.

Packers—
Goodyear Tire & Rubber Co.
Guiberson Corp.
Larkin & Co.
Layne & Bowler Co.
Oil Well Supply Co.
Regan Forge & Engineering Co.
Spang & Co.

Packing—
Black, Sivalls & Bryson, Inc.
Garlock Packing Co.
Goodrich, B. F., Rubber Co.
Imperial Belting Co.
Johns-Manville, Inc.

Paints—
Aluminum Co. of America
Continental Supply Co.
Cook Paint & Varnish Co.
Detroit Graphite Co.
Eagle Picher Lead Co.
Sherwin-Williams Co.

Paraffin Wax Plant Equipment—
Carbondale Machine Co.

Pipe—Cast Iron—
American Cast Iron Pipe Co.
Continental Supply Co.
Greenspon's, Jos., Sons Iron & Steel Co.
International Supply Co.
U. S. Cast Iron Pipe Fdy. Co.

Pipe—Lead Chemical and Antimonial—
Eagle Picher Lead Co.

Pipe—Steel—
Jarecki Mfg. Co.
Kellogg, M. W. Co.
National Supply Co.
National Tube Co.
Republic Iron & Steel Co.
South Chester Tube Co.
Spang, Chalfant & Co., Inc.
Superior Tube Co.

Pipe—Wrought Iron—
Frick-Reid Supply Co.
Oil Well Supply Co.
Reading Iron Co.
Superior Tube Co.

Pipe and Nipple Threading Machines—
Bignall & Keeler Machine Wks.
Landis Machine Co.
Standard Engineering Co.

Pipe Clamps (See Clamps—Pipe)

Pipe Fittings (See Fittings)—

Pipe Grips—
Larkin & Co.

Pipe Headers—
National Tube Co.
Newton Process Mfg. Co.

Pipe Line Construction Tools—
National Transit Pump & Machine Co.

Pipe Line Ditchers (See Ditchers)

Pipe Line Equipment—
Gaso Pump & Burner Mfg. Co.

Pipe Screwing Machines—
Buckeye Traction Ditcher Co.

Pipe Threading Dies (See Dies)—

Pipe Tools—
Armstrong Brothers Tool Co.
Nye Tool & Machine Works

Piping—Fabricated—
Kelly & Jones Co.
Midwest Piping & Supply Co.

Piping—Steel and Iron—
Crane Co.
Power Piping Co.
United Iron Works

Pistons—
Guiberson Corp.
Heppenstall Forge & Knife Co.

Pistons—Expansion—
Wilson Oil Tools Corp.

Pistons—Slush Pump—
Arbon, Paul, & Co.
Guiberson Corp.

Plain End Pipe Couplings (See Couplings—Plain End Pipe)—

Plugs—Bottom Water—
Guiberson Corp.

Polish Rods (See Rods—Polish)—

Portable Drilling Rigs (See Rigs)

Power Puller—
Jones Oil Well Reamer Co.

Power Pumps (See Pumps)—

Power Units—Portable (See Engines)—

Pre-Heaters—
Newton Process Mfg. Co.

Pulleys—Casing—
Bridgeport Machine Co.

Pulleys—Friction Clutch—
Havana Mfg. Co.

Pulleys—Wood, Iron and Steel—
Dodge Mfg. Corp.

Pulling Machines—
Iron King Mfg. Co.
National Supply Co.
Safety Pulling Machine Co.

Pumping and Pulling Motors—Electric—
Westinghouse Electric & Mfg. Co.

Pumping Equipment—
American Well Works
Axelson Machine Co.
Goulds Mfg. Co.
Jones, S. M., Co.
Myers, F. E., Bro. & Co.
Northrup Equipment Co.
Oil Well Supply Co.
Prescott Co.
Waukesha Motor Co.

Pumping Hangers—
Bridgeport Machine Co.

Pumping Jacks (See Jacks)—

Pumping Gears Units—
Nuttall, R. D., & Co.

Pumping Powers—
Aldrich Pump Co.
Barnes Mfg. Co.
Bessemer Gas Engine Co.
Buda Co.
Climax Engineering Co.
Frick-Reid Supply Co.
Jones, S. M., Co.
Kansas City Hay Press Co.
National Supply Co.
Oil Well Supply Co.
Pattin Brothers Co.
Reid, Joseph, Gas Engine Co
Spence Machine Co.
Titusville Iron Works Co.

Pumps—Air Lift—
Ingersoll-Rand Co.

Pumps—Boiler Feed—
Ajax Iron Works
Fairbanks-Morse & Co.
Gardner Governor Co.
Worthington Pump & Machinery Corp.

Pumps—Centrifugal—
American Well Works
Dean Hill Pump Co.
Fairbanks-Morse & Co.
Worthington Pump & Machinery Corp.

Pumps—Direct Driven—
Aldrich Pump Co.
Bessemer Gas Engine Co.

Pumps—Electric—
Prescott Co.

Pumps—Fuel Oil Service—
Aldrich Pump Co.
Blackmer Rotary Pump Co.

Pumps—Fuel Oil Transfer—
Aldrich Pump Co.

Pumps—Gear Driven—
Aldrich Pump Co.
Gaso Pump & Burner Mfg. Co.
Lucey Mfg. Corp.
Prescott Co.

Pumps—Pipe Line—
Aldrich Pump Co.
Frick-Reid Supply Co.
Gardner Governor Co.
National Transit Pump & Machine Co.
Prescott Co.
Worthington Pump & Machinery Corp.

Pumps—Power—
Aldrich Pump Co.
Dean Brothers Co.
Fairbanks-Morse & Co.
Gardner Governor Co.
Gaso Pump & Burner Mfg. Co.
Myers, F. E., Bro. & Co.
National Transit Pump & Machine Co.
Novo Engine Co.
Prescott Co.
Waukesha Motor Co.
Worthington Pump & Machinery Corp.

Pumps—Refinery—
Aldrich Pump Co.
Dean Hill Pump Co.
Gardner Governor Co.
Gaso Pump & Burner Mfg. Co.
Kinney Mfg. Co.
National Transit Pump & Machine Co.
Worthington Pump & Machinery Corp.

Pumps—Rotary—
Blackmer Rotary Pump Co.
Roots, P. H. & F. M., Co.

Pumps—Sand—
Bridgeport Machine Co.
Larkin & Co.

Pumps—Slush—
Gardner Governor Co.

Pumps—Steam—
Dean Brothers Co.
Fairbanks-Morse & Co.
Frick-Reid Supply Co.
Gardner Governor Co.
Gaso Pump & Burner Mfg. Co.
Lucey Mfg. Co.
National Transit Pump & Machine Co.
Prescott Co.
Vogt Brothers Mfg. Co.

Pumps—Suction—
Gaso Pump & Burner Mfg. Co.

Pumps—Vacuum—
Bessemer Gas Engine Co.
Clark Brothers Co.
Gaso Pump & Burner Mfg. Co.
Miller Improved Gas Engine Co.
Roots, P. H. & F. M., Co.
Worthington Pump & Machinery Corp.

Pumps—Water—
Aldrich Pump Co.
American Well Works.
Gaso Pump & Burner Mfg. Co.
Prescott Co.

Purifiers—Oil Absorption—
Sharples Specialty Co.

R

Ratchet Pipe Cutters—
Toledo Pipe Threading Machine Co.

Ratchet Pipe Threaders—
Toledo Pipe Threading Machine Co.

Ratchet Stocks and Dies—
Toledo Pipe Threading Machine Co.

Ratchet Wrenches (See Wrenches)

Reamers—
Bridgeport Machine Co.
Jones Oil Well Reamer Co.

Receiving Boxes—
Reid, Joseph, Gas Engine Co.

Recorders—Differential Pressure—
Metric Metal Works

Refinery Equipment—
American Radiator Co.
Braun, C. F. & Co.
Carbondale Machine Co.
Chicago Bridge & Iron Works
Graver Corp.
Griscom-Russell Co.
Kaw Boiler Works Co.
Kellogg, M. W. Co.
Newton Process Mfg. Co.
Power Piping Co.
Power Specialty Co.
Ross-Meehan Foundries
Reid, Joseph Gas Engine Co.
Smith Separator Co.
Universal Oil Products Co.
Vogt, Henry, Machine Co.
Walsh & Weidner Boiler Co.
Westcott & Greis

Refinery Pumps (See Pumps)—

Refractories—Furnace, Stills and Baffles—
Botfield Refractories Co.

Refrigerating Machinery—
Carbondale Machine Co.
Climax Engineering Co.
Vogt, Henry, Machine Co.

Regulators—
Fisher Governor Co. Inc.
Oil Conservation Engineering Co.
Smith Separator Co.

Rental Service—
Bridgeport Machine Co.

Reversible Clutches—
Bessemer Gas Engine Co.

Rig Irons—
Bradford Rig & Reel Co.
International Supply Co.
Lucey Mfg. Corp.
National Supply Co.
Oil Well Supply Co.
Parkersburg Rig & Reel Co.

Rigs—Drilling, All Steel—
Carnegie Steel Co.
International Derrick & Equipment Co.
Moore, Lee C., & Co., Inc.

Rigs—Portable Drilling—
National Supply Co.
National Turnbuckle Derrick Co.
Star Drilling Machine Co.

River Clamps (See Clamps)—

Rods—Polish—
Bradford Motor Works
Jones, S. M. Co.

Rods—Pull—
Axelson Machine Co.
Columbus Sucker Rod Co.
Jones, S. M. Co.
Kansas City Bolt & Nut Co.

Rods—Sucker—
Axelson Machine Co.
Columbus Sucker Rod Co.
D. & B. Pump & Supply Co.
Frick-Reid Supply Co.
Jones, S. M., Co.
Kansas City Bolt & Nut Co.
National Supply Co.
Republic Supply Co.

Rods—Valve—
Jones, S. M., Co.

Roofing—
Johns-Manville, Inc.

Roofing Tin Plates (See Tin Plates—Roofing)—

Rope Socket Metal—
Eagle Picher Lead Co.

Rope—Manilla—
Ajax Rope Co., Inc.
Bovaird Supply Co.
Republic Supply Co.
Wall Rope Works, Inc.

Rope—Wire—
American Cable Co.
Bovaird Supply Co.
Broderick & Bascom Rope Co.
Bridgeport Machine Co.
International Supply Co.
Jarecki Mfg. Co.
Leschen, A., & Sons Wire Rope Co.
Wickwire-Spencer Steel Corp.

Rotary Bit Steel—
Heppenstall Forge & Knife Co.

Rotary Disc Bits (See Bits)—

Rotary Drilling Equipment—
Climax Engineering Co.
Continental Supply Co.
Frick-Reid Supply Co.
International Derrick & Equipment Co.
Link-Belt Co.
Lucey Mfg. Corp.
Lufkin Foundry & Machine Co.
National Supply Co.
Oil Well Supply Co.
Republic Supply Co.
Titusville Iron Works Co.

Rotary Drive Bushings (See Bushings—Rotary Drive)—

Rotary Lines (See Rope—Wire)—

Rotary Post—
Reed Roller Bit Co.

Rotary Rock Bits (See Bits)—

Rotary Tools Joints—
Bartlesville Supply Co.
Hughes Tool Co.

Rotary Ventilators—
Swartwout Co.

Rubber Belting (See Belting)—

Rubber Hose (See Hose)—

Run Down Tanks (See Tanks)—

Rust Preventatives—
Dearborn Chemical Co.
Eagle Picher Lead Co.

S

Sand Line Caps—
Oil Well Improvements Co.

Sand Lines—Wire—
Broderick & Bascom Rope Co.
Wickwire-Spencer Steel Corp.

Sand Pumps (See Pumps-Sand)

Screens—Oil Well—
Layne & Bowler Co.

Screens—Water Well—
Layne & Bowler Co.

Screws—Temper—
Arbon, Paul & Co.
Burns Tool Co.

Seamless Steel Couplings (See Couplings—Seamless Steel)

Securities—Oil—
Pforzheimer, Carl H. & Co.

Separators—Centrifugal—
Miller, Max B. & Co.
Sharples Specialty Co.

Separators—Gas and Oil
American Tank Co.
Smith Separator Co.

Sheet Lead—Chemical and Antimonial—
Eagle-Picher Lead Co.

Sheets—
American Steel Band Co.

Sheets—Blue Annealed—
Kansas City Bolt & Nut Co.

Sheets — Corrugated, Black and Galvanized—
American Sheet & Tin Plate Co.
American Steel Band Co.

Sheets—Steel—
American Sheet & Tin Plate Co.
Republic Iron & Steel Co.

Sleeves—
Dayton Pipe Coupling Co.
Dresser, S. R. Mfg. Co.

Sleeves—Split—
Dayton Pipe Coupling Co.
Dresser, S. R. Mfg. Co.

Slush Pumps Pistons (See Pistons)—

Slush Pumps (See Pumps)—

Smoke Stacks—
Donovan Boiler Works

Sockets—
Acme Fishing Tool Co.
Bridgeport Machine Co.
Spang & Co.

Solders—Bar and Wire—
Eagle-Picher Lead Co.

Spears—
Acme Fishing Tool Co.

Special Steel (See Steel—Special

Split Sleeves (See Sleeves)—

Sprockets—Power Transmission—
Ajax Iron Works
Chain Belt Co.

Stationary Pipe Threading Die Heads (See Die Heads)—

Steam Pumps—(See Pumps)—

Steel—All Kinds—
Ryerson, Jos. T., & Sons, Inc.

Steel—Alloy—
Central Steel Co.

Steel—Bit—
Central Steel Co.

Steel—Hot Rolled Strip—
Central Steel Co.

Steel—Special—
Central Steel Co.

Steel Band Wheels (See Band Wheels—Steel)—

Steel Bridges (See Bridges)—

Steel Bull Wheels (See Bull Wheels—Steel)—

Steel Castings (See Castings)—

Steel Couplings for Casing, Line Pipe, Drill Pipe and Tubing (See Couplings)—

Steel Crown Blocks (See Crown Blocks)—

Steel Derricks (See Derricks)—

Steel Fabricators—Structural—
Austin Co.
Braden Co.
Graver Corp.
International Derrick & Equipment Co.

Steel Fittings (See Fittings)—

Steel Pitmans—
International Derrick & Equipment Co.
Moore, Lee C., & Co., Inc.
Slater Brothers Turnbuckle Derrick Co.

Steel Plate Construction—
Chicago Bridge & Iron Works
Graver Corp.
Tulsa Boiler & Machinery Co.
Vogt, Henry, Machine Co.

Steel Sheets—(See Sheets, Steel)—

Steel Valves (See Valves—Steel)—

Steel Walking Beams (See Walking Beams—Steel)—

Steel Wheels and Tug Rims—
Carnegie Steel Co.
International Derrick & Equipment Co.

Stills—
Blaw-Knox Co.
Chicago Bridge & Iron Works
Graver Corp.
Kellogg, M. W. Co.
Newton Process Mfg. Co.
Petroleum Iron Works Co.
United Iron Works, Inc.
Vogt, Henry, Machine Co.

Stocks and Dies—
Toledo Pipe Threading Machine Co.

Structural Steel Fabricators (See Steel Fabricators)—

Stuffing Boxes—
Axelson Machine Co.
Kansas City Hay Press Co.

Sucker Rods (See Rods—Sucker—

Suction Pumps—(See Pumps)—

Sulphuric Acid—
Eagle-Picher Lead Co.

Swabs—
Arbon, Paul & Co.
Guiberson Corp.
Hoffman Mfg. Co.

Swedge Nipples—
Dresser, S. R. Mfg. Co.
Harrisburg Pipe & Pipe Bending Co.

Swing Joints—
Oil Conservation Engineering Co.

Swivels—
Layne & Bowler Co.
Lucey Mfg. Corp.
Titusville Iron Works Co.

T

Tank Cars (See Cars—Tanks)—

Tank Cars Leased (See Cars)—

Tank Equipment—
Oil Conservation Engineering Co.
Westcott & Greis

Tanks—Bolted—
American Tank Co.
Black, Sivalls & Bryson, Inc.
Butler Mfg. Co.
Gantz Tank Co.
Maloney Tank Mfg. Co.
Parkersburg Rig & Reel Co.

Tanks—Bulk Station—
Columbian Steel Tank Co.
Graver Corp.

Tanks—Elevated Steel—
Chicago Bridge & Iron Works

Tanks—Field Storage—
American Car & Foundry Co.
American Tank Co.
Black, Sivalls & Bryson, Inc.
Donovan Boiler Works
Graver Corp.
Kaw Boiler Works
Kewanee Boiler Co.
Maloney Tank Mfg. Co.
Pittsburgh-Des Moines Steel Co.
Riter-Conley Co.
Tulsa Boiler & Machinery Co.
United Iron Works, Inc.

Tanks—Horizontal Storage—
Black, Sivalls & Bryson, Inc.
Columbian Steel Tank Co.
Graver Corp.
Maloney Tank Mfg. Co.
Petroleum Iron Works Co.

Tanks—Run Down—
Black, Sivalls & Bryson, Inc.
Donovan Boiler Works
Graver Corp.
Newton Process Mfg. Co.
Pioneer Tank & Boiler Co.

Tanks—Truck—
American Tank Co.
Butler Mfg. Co.
Columbian Steel Tank Co.
White Co.

Tanks—Underground—
Black, Sivalls & Bryson, Inc.
Butler Mfg. Co.
Columbian Steel Tank Co.
Graver Corp.
Kenawee Boiler Co.
Petroleum Iron Works Co.
Pittsburgh-Des Moines Steel Co.
Tulsa Boiler & Machinery Co.

Tanks—Welded—
American Tank Co.
Chicago Bridge & Iron Works
Gantz Tank Co.

Tanks—Wooden—
Black, Sivalls & Bryson, Inc.

Taper Taps—
Hughes Tool Co.

Tapes—Measuring for Oil Gauging—
Lufkin Rule Co.

Tee Casing Heads (See Casing Heads)—

Temperature Controllers (See Controllers—Temperature)—

Temper Screws (See Screws)

Thermometers — Indicating and Recording—
American Schaeffer & Budenberg Corp.
Bristol Co.
Foxboro Co., Inc.
Tagliabue, C. J., Mfg. Co.
Taylor Instrument Co.

Threading Machines—
Bignall & Keeler Machine Wks.
Landis Machine Co.

Thread Protectors—
Spang & Co.

Tin Plates—Bright—
American Sheet & Tin Plate Co.

Tin Plates—Roofing—
American Sheet & Tin Plate Co.

Tires—Automobile—
Continental Supply Co.

Tires—Pneumatic & Solid—
Kelly-Springfield Tire Co.

Tires—Truck—
Kelly-Springfield Tire Co.

Tongs—
Bridgeport Machine Co.
Dunn Mfg. Co.
Wilson Oil Tools Corp.

Tongs—Back Up—
Williams, J. H., & Co.

Tongs—Break Out—
Reed Roller Bit Co.
Williams, J. H., & Co.

Tongs—Casing—
Guiberson Corp.

Tongs—Chain Pipe—
Williams, J. H., & Co.

Tongs—Pipe—
National Transit Pump & Machine Co.

Tongs—Tool Joint —
Guiberson Corp.
Hughes Tool Co.
Reed Roller Bit Co.

Tool Joints—
Bridgeport Machine Co.
Hughes Tool Co.
Lucey Mfg. Corp.
Regan Forge & Engineering Co.

Tool Joint Tongs (See Tongs)—

Tools—Fishing and Drilling (See Drilling and Fishing Tools)—

Tools — Oil Well Drilling (See Drilling and Fishing Tools)—

Torches—
Oxweld Acetylene Co.

Tractor Oil (See Oil—Tractor)—

Tractors—
International Harvester Co. of America

Transmission Belt—Rubber—
Goodrich, B. F., Rubber Co.

Transmission Lining—
Stanley Belting Corp.

Traveling Block—
Lucey Mfg. Corp.
Regan Forge & Engineering Co.
Wright Manufacturing Co.

Trenchers—Vertical Boom—
Barber-Greene Co.

Trucks—Motor—
General Motors Truck Co.
International Harvester Co. of America
White Co.

Truck Tanks (See Tanks)—

Truck Tires (See Tires—Truck)—

Tubes—Boiler, Charcoal Iron—
Reading Iron Co.

Tubes—Boiler Steel—
National Tube Co.

Tubing—
National Tube Co.
Reading Iron Co.
Spang, Chalfant & Co., Inc.
Superior Tube Co.

Tubing Catchers—
Dunn Mfg. Co.
Guiberson Corp.

Tubing Elevators (See Elevators, Casing and Tubing)—

Tubing Rings—
Oil Well Improvements Co.

Tubular Goods—
Oil Well Supply Co.
Republic Iron & Steel Co.
South Chester Tube Co.
Spang, Chalfant & Co., Inc.

Tubular Goods—Wrought Iron—
Reading Iron Co.
South Chester Tube Co.

Turbines for Lighting Equipment—
Lucey Mfg. Corp.
Pyle National Co.
Westinghouse Electric & Mfg. Co.

Turbine Generators (See Generators—Turbine)—

Turnbuckle Derricks (See Derricks)—

U

Underground Tanks (See Tanks)

Underreamer Bit Still—
Heppenstall Forge & Knife Co.

Underreamer Cutter Steel—
Heppenstall Forge & Knife Co.

Underreamers—
Bridgeport Machine Co.
Guiberson Corp.
Wilson Oil Tools Corp.

Unions—
Continental Supply Co.
Kelly & Jones Co.

V

Vacuum Pumps (See Pumps)—

Valuations—
American Appraisal Co.

Valves—Blow-off—
Homestead Valve Co.

Valves—Brass and Bronze—
Chapman Valve Mfg. Co.
Kelly & Jones Co.
Lunkenheimer Co.
Reading Steel Casting Co.
Walworth Mfg. Co.

Valves—Check—
Gaso Pump & Burner Mfg. Co.

Valves—Drop Forged Steel—
Edward Valve & Mfg. Co.
Vogt, Henry, Machine Co.

Valves — Gate — High and Low Pressure—
Chapman Valve Mfg. Co.
Continental Supply Co.
Crane Co.
Darling Valve & Mfg. Co.
Homestead Valve Co.
Kennedy Valve Mfg. Co.
Kelly & Jones Co.
Ludlow Valve Mfg. Co.
Lunkenheimer Co.
Pittsburgh Reinforced Brazing & Machine Co.
Powell, Wm., Co.

Valves—Iron—
Reading Steel Casting Co.

Valves—Relief—Supersensitive —
Davis Regulator Co.

Valves—Steel —
Edward Valve & Mfg. Co.
Kelly & Jones Co.
Lunkenheimer Co.
Metric Metal Works
Pittsburgh Reinforced Brazing & Machine Co.
Powell, Wm., Co.
Reading Steel Casting Co.

Valves—Tank Vent—
Black, Sivalls & Bryson, Inc.
Oil Conservation Engineering Co.

Valves—Working Barrel—
Axelson Machine Co.
Hough, Charles N. Mfg. Co.
Northrup Equipment Co.

Varnishes—
Sherwin-Williams Co.

W

Wagons—Truss Wheel—
Athey Truss Wheel Co.

Walking Beams—Steel—
Moore, Lee Co., & Co., Inc.

Water Gauge Cocks (See Cocks)—

Water Pumps (See Pumps)—

Water Softeners and Fiters—
Graver Corp.

Water Wells Screens ,See Screens

Wax—
Barnsdall Refining Co.
Gulf Refining Co.
Pure Oil Co.

Weight Indicators—
Hughes Tool Co.

Welded Tanks—(See Tanks)—

Welding Accessories—Electric—
Wilson Welder & Metals Co.

Welding and Cutting Apparatus Etc.—
Oxweld Acetylene Co.

Welding Machines—Electric—
Wilson Welder & Metals Co.

Welding Supplies—
Oxweld Acetylene Co.

Welding Wire—
Frick-Reid Supply Co.
Oxweld Acetylene Co.
Page Fence & Wire Products Ass'n
Wilson Welder & Metals Co.

Well Drilling and Fishing Tools (See Drilling and Fishing Tools)—

Well Drilling Equipment (See Drilling Equipment)—

Well Shooting—
Eastern Torpedo Co.
Zero Hour Torpedo Co.

Wheels—Steel Automotive—
Budd Wheel Co.

Winches—
Braden Co.
Oil Conservation Engineering Co.

Wire Lines (See Cables—Steel)—

Wire Ropes (See Rope—Wire)—

Wood Patterns and Models—
Gaso Pump & Burner Mfg. Co.

Working Barrels—
Axelson Machine Co.
Bradford Motor Works
Franklin Valveless Engine Co.
Frick-Reid Supply Co.
Hough, Charles N., Mfg. Co.
McGregor Working Barrel Co.
Northrup Equipment Co.

Working Barrel Valves (See Valves—Working Barrel)—

Wrenches—Drop Forged—
Williams, J. H., Co.

Wrenches—Pipe—
Trimont Mfg. Co.
Walworth Mfg. Co.

Wrenches—Ratchet—
Dresser, S. R., Mfg. Co.

Z

Zinc Oxide—
Eagle-Picher Lead Co.

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Oklahoma-Kansas and Eastern Pipe Line Report

OKLAHOMA-KANSAS

Pipe Line Statement for July, 1925

Runs

	Month	Da. Av.
*Prairie P. L. Co.	4,470,200	144,200
Gulf P. L. Co.	1,283,994	41,419
Texas P. L. Co.	578,082	18,648
Magnolia Pet. Co.	1,031,333	33,269
Empire P. L. Co.	899,692	29,020
Cosden P. L. Co.	785,229	25,330
Sinclair P. L. Co.	1,398,100	45,100
*Other lines	7,719,000	249,000
Total July	18,165,630	585,986
Total June	17,214,563	573,819
Difference	951,067	12,167

Shipments

‡Prairie Pipe Line Co.	4,716,115	157,204
*Prairie P. L. Co.	4,822,608	155,568
Gulf P. L. Co.	1,279,186	41,263
Texas P. L. Co.	410,509	13,242
Magnolia Pet. Co.	1,252,985	40,419
Empire P. L. Co.	992,422	32,014
Cosden P. L. Co.	663,736	21,411
‡Sinclair P. L. Co.	2,268,870	73,189
*Other Lines	8,122,000	262,000
Total July	18,812,316	639,106
Total June	19,910,042	663,668
Difference	97,726	24,562

Stocks

*Prairie O. & G. Co.	24,525,000
*Prairie P. L. Co.	2,000,000
Gulf P. L. Co. & Gypsy Oil Co.	8,102,460
The Texas Co.	4,773,710
Magnolia Pet. Co.	7,154,232
Empire P. L. Co.	3,292,080
Cosden P. L. Co.	2,160,427
Sinclair Crude Oil Pur. Co.	24,500,000
Carter Oil Co.	17,012,142
*Other Lines	10,500,000
Total July	104,210,051
Total June	106,918,582
Difference	2,708,471

NOTE—Stocks do not include approximately 6,600,000 bbls. of crude oil held in storage on private tank farms and leases.

*Estimated. ‡Prairie shipments include Texas crude oil and Sinclair shipments include Texas and Wyoming crude oil.

EASTERN PIPE LINES

Runs From Wells

In the following table will be found the regular receipts from wells by various pipe lines in New York, Pennsylvania, West Virginia, Ohio, Kentucky and Indiana for June and July:

	June '25	July '25
Nat. Transit	172,001.29	163,353.62
S. W. Pa. P. L.	86,007.04	86,680.58
Eureka P. L.	363,222.68	367,819.25
Buckeye P L (Macksburg)	298,724.58	299,163.38
Buckeye P. L. Cleveland)	13,365.82	13,378.31
Buckeye P. L. (Lima, etc.)	146,252.83	141,313.96
Indiana P. L.	12,891.08	11,984.81
Cumberland P. L.	290,298.73	313,906.38
New York Transit	19,287.60	19,566.44
Tidewater P. L.	147,209.66	154,800.11
Pure Oil	186,067.49	183,237.30
Emery P. L.	49,218.50	50,999.53
Indian Ref.	90,018.19	93,779.94
Paragon Dev.	24,742.14	33,666.10
Pittsburgh P. L.		7,976.02
Total	1,899,377.63	1,941,804.63
Daily average	61,270.24	62,638.86

Note—Indian Refining Co. also reported other receipts of 353,992.01 bbls. Paragon Refining Co. had other receipts of 177,993.55 bbls. Paragon Development Co. had other receipts of 3,257.81 bbls. Pure Oil had other receipts of 32,591.83 bbls. Pittsburgh Pipe Line and other receipts of 2,007.03 bbls.

Petroleum Deliveries

The following tables exhibit the shipments or regular deliveries of various pipe lines in New York, Pennsylvania, West Virginia, Ohio, Kentucky and Indiana for June and July:

	June '25	July '25
Nat. Transit	320,520.47	378,171.30
S. W. Pa. P. L.	386,545.00	351,860.31
Eureka P. L.	187,674.83	166,860.15
Buckeye P. L. (Macksburg)	131,155.43	102,248.69
Buckeye P. L. (Cleveland)	1,214.54	729.09
Buckeye P. L. (Lima, etc.)	962,881.52	1,019,235.51
Indiana P. L.	979,887.76	1,015,237.87
Cumberland P. L.	149,871.72	147,658.16
Crescent P. L.	46,146.60	22,458.79
New York Transit	333,687.40	522,403.15
Northern P. L.	135,867.36	142,147.95
Tidewater P. L.	150,624.26	168,760.54
Pure Oil	223,505.40	232,769.23
Emery P. L.	46,976.71	51,616.93
Paragon Ref.	206,632.16	194,291.32
Indian Ref.	340,609.05	455,773.33
Paragon Dev.	29,687.52	20,860.66
Pittsburgh P. L.		9,370.15
Total	4,633,487.72	5,001,493.06
Daily average	149,467.34	161,338.49

Paragon Development had other receipts of 14,613.73 bbls.

Gross Stocks

The gross stocks held by various pipe lines in the oil producing section of New York, Pennsylvania, West Virginia, Ohio Indiana and Kentucky at the close of June and July were as follows:

	June '25	July '25
Nat. Transit	953,273.29	1,049,158.63
S. W. Pa. P. L.	727,762.35	679,849.73
Eureka P. L.	1,372,128.59	1,368,320.62
Buckeye P. L. (Macksburg)	256,386.67	259,449.10
Buckeye P. L. (Cleveland)	32,593.90	45,131.11
Buckeye P. L. (Lima, etc.)	3,363,803.39	3,594,400.38
Indiana P. L.	586,016.21	575,519.72
Cumberland P. L.	580,073.99	602,764.14
Southern P. L.	375,084.98	408,032.34
Crescent P. L.	58,190.72	32,557.96
New York Transit	1,041,112.91	817,869.37
North P. L.	1,048,050.32	960,052.73
Pure Oil	409,109.26	390,271.16
Emery P. L.	28,039.76	27,785.01
Paragon Ref.	161,678.55	144,615.56
Indian Ref.	95,550.10	100,650.93
Paragon Dev.	4,940.81	6,643.95
Pittsburgh P. L.		4,380.97
Total	11,093,795.80	11,067,453.41
Decrease	113,766.13	26,342.39

Grades of Oil

The following table shows the amount of the different grades of oil held by the Eastern pipe lines at the close of June and July, showing the gross stocks of the above fields:

	June '25	July '25
Penna	3,639,325.56	3,652,264.08
Lima	1,263,321.15	1,232,851.05
Kentucky	1,212,445.28	1,244,959.99
Mid-Continent	4,944,848.33	4,910,618.25
Illinois	33,855.48	26,760.05
Total	11,093,795.80	11,067,453.41

Daily Average Runs

The following table shows the daily average runs of the Pennsylvania, Lima and Kentucky oil fields for the past four years:

	1922	1923	1924	1925
January	67,702	75,790	62,638	56,831
February	75,096	71,092	63,023	60,606
March	78,531	76,592	68,721	60,575
April	75,462	75,614	71,068	63,062
May	77,592	77,365	63,942	59,217
June	76,193	77,593	63,230	61,270
July	76,435	71,879	64,208	62,639
August	79,387	76,910	59,942	.....
September	78,512	72,358	62,930	.....
October	77,209	76,256	64,976	.....
November	75,313	70,762	56,282	.....
December	73,351	69,271	55,814	.....

Daily Average Shipments

The following table gives daily average shipments from the Pennsylvania, Lima and other fields for the past four years:

	1922	1923	1924	1925
January	119,792	171,067	145,518	157,889
February	111,362	164,219	148,732	160,863
March	127,753	185,487	147,098	154,591
April	127,068	170,751	147,611	151,429
May	127,840	177,102	134,997	146,995
June	137,638	173,598	143,010	149,467
July	137,872	168,330	124,187	161,338
August	153,275	142,766	123,120	.....
September	158,761	137,266	127,325	.....
October	165,345	134,597	123,170	.....
November	165,677	131,426	124,400	.....
December	172,361	139,909	161,392	.....

Gross Stocks

In the following table will be found the gross stocks of the various lines of the Pennsylvania, Lima and Kentucky oil fields, including oil received from other lines, at the close of each month for the past three years:

	1923	1924	1925
January	14,040,567	12,907,203	11,353,276
February	14,028,437	11,844,068	11,192,924
March	13,873,146	10,906,752	11,158,297
April	13,737,575	10,922,742	11,062,082
May	13,816,622	11,335,309	11,207,562
June	14,541,253	11,644,204	11,093,796
July	14,645,584	12,062,361	11,067,453
August	14,770,539	12,221,676	.....
September	14,803,444	12,206,836	.....
October	14,504,111	12,664,061	.....
November	14,157,726	12,268,530	.....
December	13,444,361	11,582,650	.....

Franklin Pipe Line Co.

The following table exhibits the condition of the Franklin Pipe Line at the close of business for the months named and not counted in the stocks and averages reported above:

	Receipts	Shiptments	Stocks
1924—			
July	3,067.74	3,334.29	13,214.51
August	2,001.36	6.21	16,109.73
September	2,794.58	5,776.89	13,128.42
October	3,342.40	1,880.50	14,590.32
November	2,700.13	482.89	12,427.56
December	3,120.34	2,659.13	12,888.77
1925—			
January	1,730.86	1,681.15	12,938.48
February	2,702.05	4,564.70	11,076.83
March	3,177.21	2,354.30	11,898.74
April	3,040.41	1,780.11	13,159.04
May	2,814.99	5,719.90	10,254.13
June	3,052.75	1,221.83	12,085.05
July	2,639.34	3,174.10	11,550.29

The Illinois Field

The following table gives the report of the Illinois Pipe Line Co. in Illinois:

Gross stocks August 1	1,889,674.78
Runs from wells	694,990.13
Other receipts	562,569.82
Regular deliveries	466,976.64
Other deliveries	649,021.15

The amount of Illinois oil run by the Tidewater Pipe Line Co. in July was 28,491.14 bbls., and deliveries were 97,736.55 bbls. Adding these figures to those of the Illinois Pipe Line Co. makes the runs and deliveries as follows:

1924—	Runs	Deliveries
July	759,646.84	552,386.50
August	720,457.72	519,335.79
September	714,875.36	535,762.80
October	741,767.42	542,863.77
November	650,147.63	521,459.21
December	640,919.23	595,942.28
1925—		
January	695,513.43	572,304.77
February	636,635.20	514,661.52
March	754,335.63	611,348.49
April	632,865.14	637,242.85
May	692,671.94	568,573.62
June	700,090.46	589,535.24
July	724,481.26	564,713.19

The Tidewater Pipe Co., Ltd., also delivered in July, 239,627.49 bbls. of Oklahoma oil. The total deliveries of all grades by the Tidewater were 506,124.58 bbls.

AVERAGE WEEKLY RECEIPTS OF CALIFORNIA OIL AT ATLANTIC AND GULF PORTS

Average bbls. per week	ATLANTIC PORTS						GULF COAST PORTS						Total All Ports
	Baltimore	Boston	New York	Philadelphia	Others	Total	Galveston	New Orleans Baton Rouge	Port Arthur Sabine Pass	Tampa	Total		
April	22,162	68,600	269,031	119,700	133,000	612,493	.....	17,731	.....	.....	17,731		630,224
May	57,806	35,000	292,873	86,685	92,127	564,491	.....	.....	.....	.....	.....		564,491
June	60,669	17,731	136,031	117,600	44,569	376,600	.....	70,238	.....	2,569	72,807		449,407
July	36,127	79,891	265,321	93,042	89,873	569,254	.....	39,515	.....	.....	39,515		608,769

AVERAGE WEEKLY IMPORTS OF PETROLEUM AT PRINCIPAL UNITED STATES PORTS

Average bbls. per week—	ATLANTIC PORTS						GULF COAST PORTS					Total All Ports
	Baltimore	Boston	New York	Philadelphia	Others	Total	Galveston	New Orleans Baton Rouge	Port Arthur Sabine Pass	Tampa	Total	
April	130,900	60,200	418,369	68,831	144,900	823,200	145,131	321,300	84,931	50,869	602,231	1,425,431
May	195,776	54,873	440,097	112,903	135,261	938,910	229,030	254,030	59,773	41,818	574,651	1,513,561
June	157,962	84,700	497,000	101,738	238,938	1,080,338	225,638	196,938	63,000	24,033	509,609	1,589,947
July	93,709	55,545	304,612	123,515	156,485	733,866	173,873	238,455	35,679	53,291	501,298	1,235,164

GROSS PRODUCTION IN THE UNITED STATES FOR 12 MONTHS

1924		California	Oklahoma	Texas	Kansas	Arkansas	Louisiana	Rocky Mountain	Eastern Fields	Total
August:	Month	19,112,998	16,525,356	11,808,876	2,717,398	4,359,241	1,703,525	3,749,375	3,286,000	63,261,769
	Daily average	616,548	533,076	380,931	87,658	140,621	54,920	120,948	106,000	2,040,701
September:	Month	18,308,233	16,299,030	11,089,492	2,638,900	4,029,535	1,795,575	3,330,007	3,150,000	60,640,772
	Daily average	610,274	543,301	369,650	87,963	134,318	59,853	111,000	101,936	2,021,359
October:	Month	18,696,559	16,189,898	10,942,005	2,768,455	3,983,696	1,774,707	3,058,268	3,395,000	60,808,588
	Daily average	603,115	522,255	353,000	89,305	128,506	57,249	98,654	109,516	1,961,567
November:	Month	17,767,034	15,955,620	10,731,264	2,597,460	3,461,050	1,965,921	2,788,110	3,941,000	58,207,459
	Daily average	592,234	531,854	357,709	86,582	115,035	65,531	92,937	98,033	1,940,248
December:	Month	18,795,126	16,031,185	11,264,915	2,537,443	3,380,511	1,870,876	2,302,888	3,000,850	59,183,794
1925	Daily average	606,294	517,135	363,384	81,853	109,049	60,351	74,287	96,402	1,909,155
January:	Month	18,743,288	15,462,800	13,790,195	2,520,858	3,278,484	1,774,073	2,627,676	3,065,993	61,263,366
	Daily average	604,622	498,800	444,845	81,313	105,758	57,228	84,760	98,903	1,976,238
February:	Month	16,869,833	13,905,780	11,361,896	2,466,660	2,886,296	1,647,461	2,666,335	2,905,000	54,609,216
	Daily average	602,494	496,635	405,782	88,095	103,082	58,266	95,226	103,750	1,950,333
March:	Month	18,626,009	14,403,716	13,047,068	2,824,534	3,564,473	1,807,517	2,734,235	3,282,000	60,289,552
	Daily average	600,839	464,636	420,886	91,114	114,983	58,307	88,201	105,871	1,944,502
April:	Month	17,959,653	14,055,450	12,683,520	2,971,110	7,560,240	1,695,780	2,744,691	3,157,000	62,927,444
	Daily average	598,655	468,515	422,784	99,037	252,008	56,526	91,490	107,150	2,026,692
May:	Month	18,820,328	14,486,579	13,165,005	3,493,266	11,813,996	1,887,729	2,799,542	3,167,300	69,632,745
	Daily average	607,107	467,309	424,678	112,686	381,097	60,872	90,308	102,171	2,246,250
June:	Month	19,288,135	13,932,970	13,583,740	3,175,440	9,200,372	1,900,506	2,754,498	3,289,000	66,124,661
	Daily average	642,938	461,099	419,458	105,848	306,679	63,350	91,816	109,000	2,133,053
July:	Month	20,411,049	14,263,565	12,390,917	3,686,675	7,835,819	1,898,178	3,129,199	3,548,000	66,963,402
	Daily average	658,021	460,115	396,804	118,925	252,768	61,231	100,942	108,000	2,160,110
	Total 12 months	223,398,245	181,411,949	144,858,892	34,398,199	65,353,713	21,620,802	34,684,824	38,187,143	743,913,768
	Daily average	612,050	497,156	396,874	94,242	180,421	56,495	95,027	104,621	2,038,120

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NEW YORK Grand Cent. Term. | CHICAGO Steger Building | TULSA Atlas Life Bldg. | HOUSTON West Building

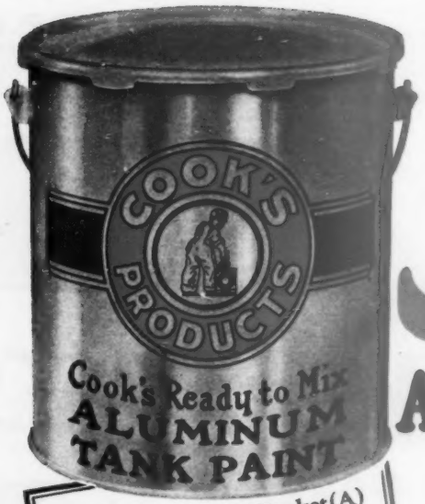
Write any office for descriptive bulletin

Advertisers' Index on Page 17 Table of Contents on Page 18

Cook has pioneered again, this time with a

fresh

READY-TO-MIX ALUMINUM TANK PAINT



Powder in the Small Bucket (A) Liquid in the Large Bucket (B) Together in a 5-Gallon Package

The large bucket "B" contains the Liquid and a separate bucket "A" which contains the Aluminum Powder. Remove the lid of the large bucket and take out the smaller Bucket containing Powder. Cut out the soft tin top of Bucket "A" and dump the Powder into the Liquid. Stir well with a wide, flat paddle that is long enough to reach the bottom of the large bucket.

Mix It on the Job as You Use It—

This *fresh* mixture gives a bright, shiny paint of superior quality, containing exactly the proper proportions of Powder and Liquid. Science has taught us that Aluminum Paint must be freshly mixed to be most effective. This unique Cook package assures *easy, foolproof mixing.*

Now, in this *new* and *unique* package, you may buy Aluminum Tank Paint that is sure to be *fresh.* Because it *is* fresh, it has greater "leafing power", it wears better, and it reflects light and heat most effectively.

Science has proved that Aluminum Paint, to be most effective, must be applied when freshly mixed. It has remained for the Cook Paint and Varnish Company, pioneers in the manufacture of paints for the oil industry, to devise a paint package which assures *easy and foolproof mixing.*

When you use Cook's Aluminum Tank Paint, you get Liquid and Powder in exactly the right proportions, ready to mix. It is bright, shiny, *new* paint—with a covering capacity of 750 square feet to the gallon. The greater leafing power of the fresh Aluminum "seals in" the paint, giving maximum wear and maximum heat reflection. One coat will do the work. It may be applied with either brush or spray.

As an undercoat, use Cook's Rust Inhibitive Primer. It prepares the surface so that less Aluminum Paint is required; and firmly anchors paint to metal.

For dado work on tanks, use Cook's Steel-Kote, the toughest paint film known. It spreads farthest, covers better, wears longer. Preserves steel and prevents rust.

Fight Sunshine with Cook's Tank Paint —Save 200 Barrels Yearly, Per Tank!

Government field tests on 55,000-barrel crude oil storage tanks show that Aluminum-painted tanks lose by evaporation 200 barrels less oil in a year's time than black tanks.

Black tanks absorb the heat from the sun's rays, causing excessive evaporation. Aluminum-painted tanks *reflect* the sun's rays, and thus remain cool. It's cheaper to paint a tank than to lose 200 barrels by evaporation!

Cook Paint and Varnish Company

Pioneers in the Manufacture of Specialized Paints for the Oil Industry

Factories: Kansas City and Fort Worth

8 Warehouses for Quick Shipments in the Mid-Continent Field: Omaha, Wichita, Oklahoma City, Tulsa, Dallas, Denver, Fort Worth, Kansas City.

Mail This Coupon Today for Cook's

Special Introductory Offer

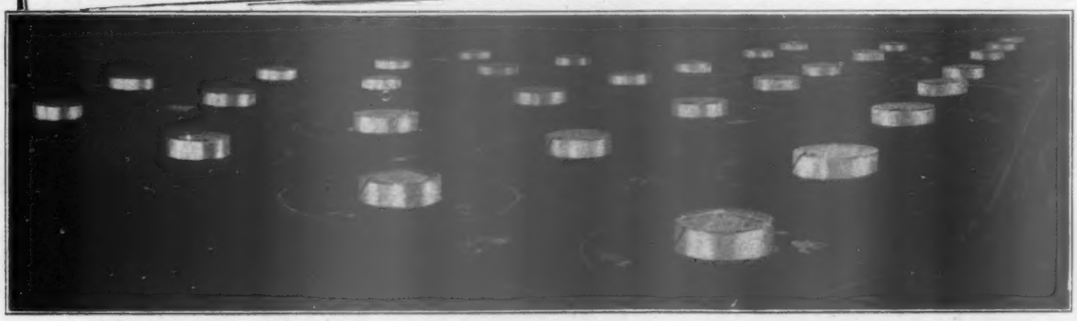
Cook Paint and Varnish Company, Oil Industry Service Dept.
1319 Grand Avenue, Kansas City, Mo.

Gentlemen: Please send me full details of your Special Introductory Offer on Cook's Ready-To-Mix Aluminum Tank Paint, in the new 5-gallon package. Also send me information regarding your Rust Inhibitive Primer and Cook's Steel-Kote. I (have) (have not) seen your booklet "Cook's Paints for the Oil Industry". Please send me a copy.

Company Name.....

Individual To Address.....

City and State.....



BRIGHT
HANDY
SAFE
!

For Safety's Sake —*use flashlights!*

Eveready Flashlights turn the brilliance of daylight into dark or dim-lighted places. They find leaks and help make repairs, without the slightest hazard of fire or explosion. They have countless uses in and around oil and gas fields, refineries, gas-houses. They protect property with their fireproof light, and save life and limb by providing plenty of light in the right place.

Eveready Flashlights should be in the company store-room, to be issued to the men on order, the same as other necessary equipment. Strong wind or driving rain cannot put out their bright light.

Manufactured and guaranteed by

NATIONAL CARBON COMPANY, Inc.
New York San Francisco
Canadian National Carbon Co., Limited, Toronto, Ontario

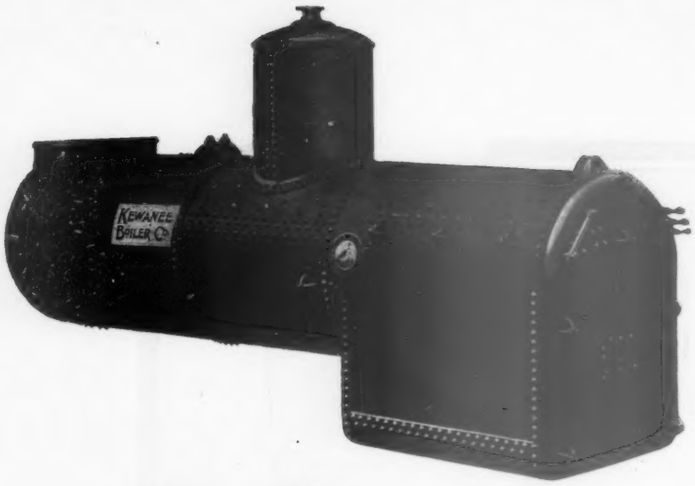
EVEREADY
FLASHLIGHTS
& BATTERIES
—they last longer

No. 2671, Eveready 2-cell Focusing Spotlight with the 200-foot range

* * *

Eveready Unit Cells fit and improve all makes of flashlights. They insure brighter light and longer battery life. Keep an extra set on hand. Especially designed Eveready-Mazda bulbs, the bright eyes of the flashlights, likewise last longer.

The Oil and Gas Journal, issued weekly by The Petroleum Publishing Company, 114-116 West Second Street, Tulsa, Oklahoma. Subscription price $6.00 a year; 15 cents a copy. Entered as second-class mail matter December 15, 1911, at the postoffice at Tulsa, Okla., under the Act of March 3, 1879.



KEWANEE

Boilers—Preferred because

They are dependable. Built solidly—they stand the hard usage to which oil field boilers are subjected without running up big repair bills.

They are the easiest fired boilers in the field. Big firing doors, at a convenient height, make it possible to fire them without unnecessary labor.

Their capacious dome, and conservative rating, gives a great reserve supply of steam to take care of unusual demands.

By Invitation Member

Emblem of
BUSINESS CHARACTER
Rice Leaders of the World Association
Represents High Standing in
NAME-PRODUCT-POLICY
COPYRIGHT R.L.W.A.-FIFTH AVE.-NEW YORK U.S.A.

Ask any man who owns or fires a Kewanee. He will tell you a lot of other reasons why he prefers them.

KEWANEE BOILER COMPANY

KEWANEE, ILLINOIS

Makers of Steel Boilers, Steel Tanks, Water Heating
Garbage Burners, Tabasco Water Heaters

Sold by International Supply Co., Tulsa

District Sales Offices:

Fort Worth, Texas Ardmore, Okla. Denver, Colo.
Casper, Wyoming Great Falls, Mont.

Branches in All Prominent Oil Fields

Two Famous EAGLE Babbitts— Dreadnaught *High-Speed* Outlasta *General Service*

EAGLE Babbitt Engineers, after years of careful research in every industry, have produced two special Eagle Babbitts: Dreadnaught *High-Speed*, and Outlasta *General Service*—which, with Standard Number Four, are designed to fill 95% of all bearing metal needs. A correct use of these three bearing metals will increase the efficiency of your plant.

Eagle Dreadnaught *High-Speed* Babbitt is designed for extreme speed and pressure conditions, pounds, shocks and vibrations; bearings of high powered generators, motors, turbines, Diesel Engines, oil, gas and gasoline engines, pumps, air compressors, etc. It carries the heaviest loads and stands the heaviest pounding without cracking or distortion. It is ideal for thin bearings. It pours and machines easily and will stand peening.

Eagle Outlasta *General Service* Babbitt is designed for all around service, constant or even speed and pressure conditions —for average to high-speed low pressure bearings or fairly heavy duty bearings with average speed. It will carry an unusual load where bearing liners are ¼" or more in thickness and of liberal area. It is the best for general use in brick, cement, coal, lead and zinc mines, oil wells, pipe line, refinery, lumber mill, cotton gin, oil mill machinery, etc.

Write for full information and free booklets about Eagle Babbitts and the money-saving Eagle Babbitt Service.

The EAGLE-PICHER LEAD COMPANY
Chicago · Joplin · Cincinnati

EAGLE BABBITT SERVICE

Producers of lead and allied products · Eleven Plants · Branches in all principal cities

A Million Dollars Worth of WESTERN ENGINES

Repeat orders tell a most convincing story. That is particularly true when *one company* continues to send in repeat orders for a certain type of engine over a period of years, totalling well over twenty thousand horsepower of an approximate value of a round million dollars.

The illustration shows one of the many power plants owned by the company referred to. Practically all their plants of this type are equipped with "Western" Duplex and Twin-Duplex Gas Engines. All their leases are dotted with "Western" Oil Field Pumping Engines and Reverse Gears. Their repeat orders for "Western" Engines of the various types have extended over a period of approximately twenty-five years.

A moment's reflection will convince one that there is a reason for such consistent use of "Western" Engines. Companies using such quantities of engines can buy any type of engine. Invariably they want the best. "Western" efficiency, economy in operation and maintenance, and absolute dependability under all conditions, have proved their supremacy for oil country service in a manner that leaves no room for doubt.

The complete historical record of the "Western" Engines ordered and owned by the company referred to above will prove interesting to any individual or company using power equipment. A brief copy, giving dates, number of engines and horsepower, will be furnished on written request. Use the coupon.

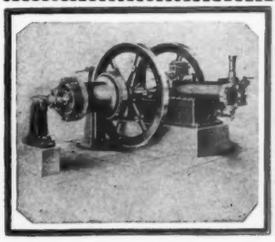
Western Machinery Company

General Offices and Factory: 904 North Main Street, Los Angeles, California, U. S. A.

720 So. Kenosha St., Tulsa, Oklahoma

San Francisco Offices and Factory: Eighteenth and Alabama Streets

1106 Nineteenth St., Bakersfield, California



WESTERN MACHINERY COMPANY
904 North Main St. Los Angeles, Calif.

Please send me, without any obligation on my part, the historical record of repeat orders for "Western" Engines referred to above.

Name .....
Company .....
Address .....
City ..... State.....

Built to Assure Dependability!

The consistent KAW policy of building super-strength into every product assures the refiner of equipment that proves its dependability during year after year of use.

The SUPERSTRENGTH *Is Built In!*

Behind KAW high pressure stills, and other steel refinery equipment manufactured in our plant, are massed the combined resources of men, material and machinery of the highest attainable standard. Every unit of KAW-built equipment is the result of specialized knowledge and is fabricated into a finished product well known for its lasting dependability and economy.

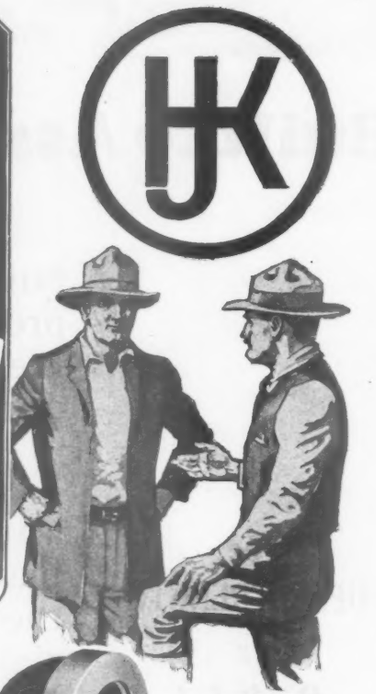
KAW

KAW refinery equipment is daily demonstrating its superiority throughout the Mid-Continent Field. It will pay you to get KAW specifications and prices first. Write or wire for them.

KAW BOILER WORKS COMPANY

General Plant and Office: 1st and Walker Ave., Kansas City, Kans.

Indispensable for High Pressure Gas and Oil Lines!



Drip, drip, drip. This is the song that the leaky fitting sings—a song of waste and loss that quickly may amount to far more than the original cost of the fitting itself. Especially is this true in the case of high pressure lines carrying costly contents.

Kelly and Jones cast iron fittings of close-grained metal, accurate to the last thread, are a source of satisfaction to the installation crew and when pulled up tight can be forgotten. They are available in a complete line, a fitting for every conceivable need.

WRITE FOR CATALOGUE "S"

Power Plant Piping, Coils and Headers of all kinds made at our Etna plant, Sharpsburg, Pa. Write for booklet.

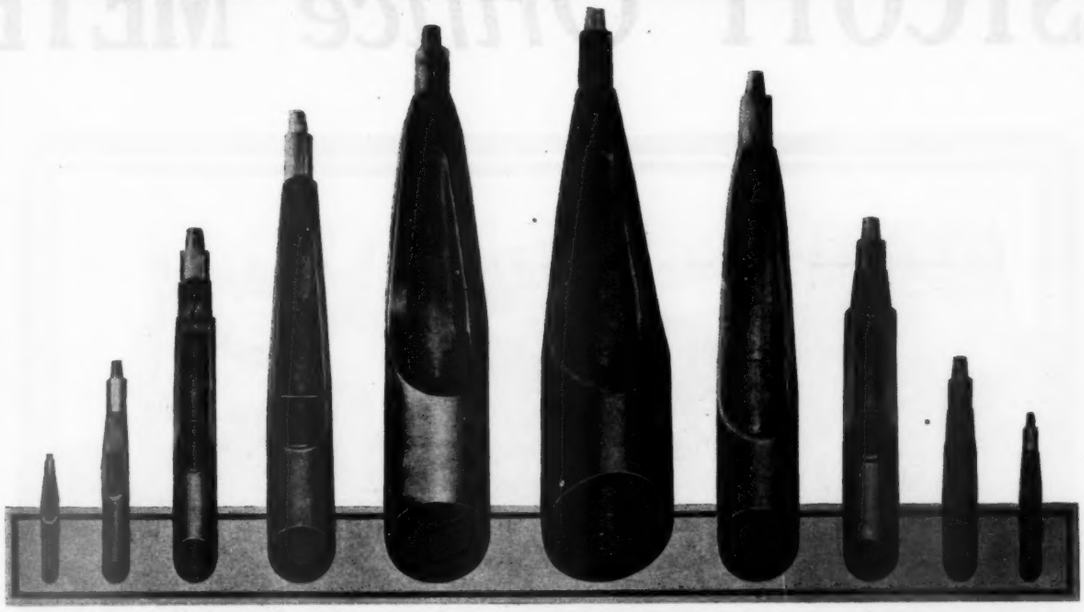
THE KELLY & JONES CO.

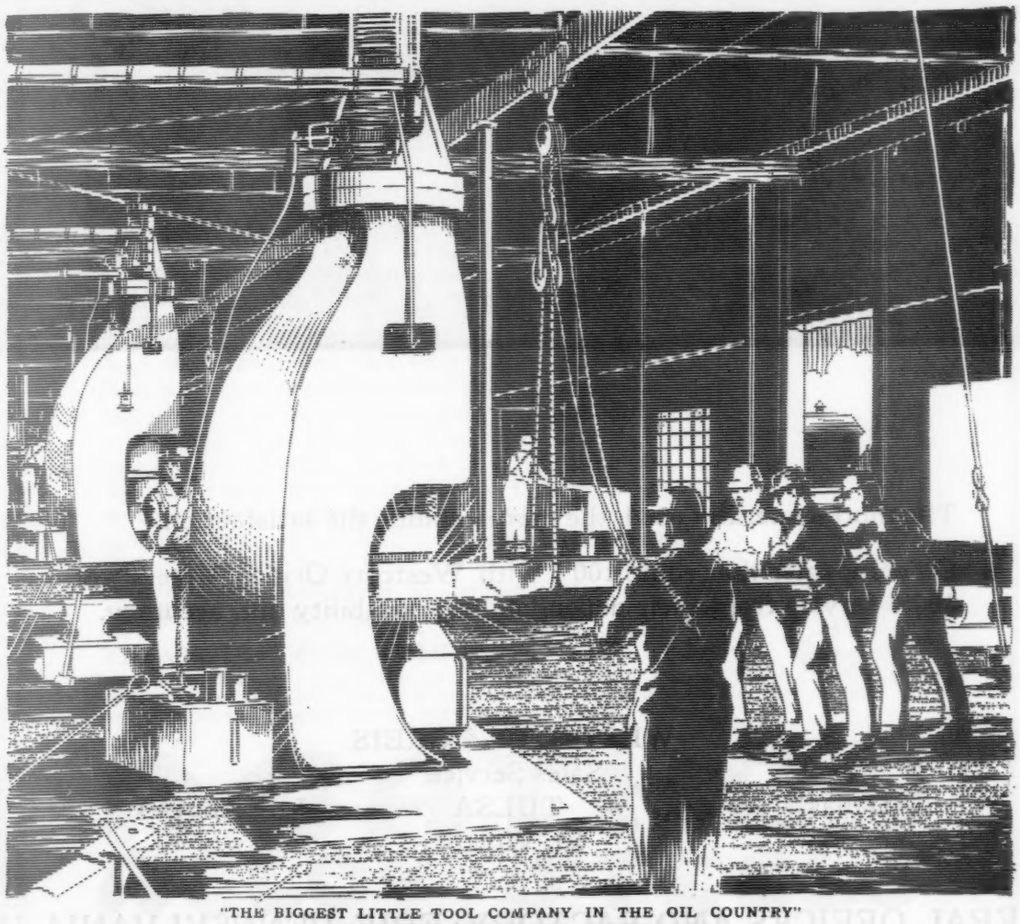
WORKS - GREENSBURG, PENNA.

BRANCH STORES AND OFFICES: NEW YORK - PITTSBURGH - CHICAGO - CINCINNATI BUFFALO - ST. LOUIS - SAN FRANCISCO

CAST IRON FITTINGS

HINDERLITER ECCENTRIC COMBINATION SOCKETS





"THE BIGGEST LITTLE TOOL COMPANY IN THE OIL COUNTRY"

HINDERLITER TOOL COMPANY

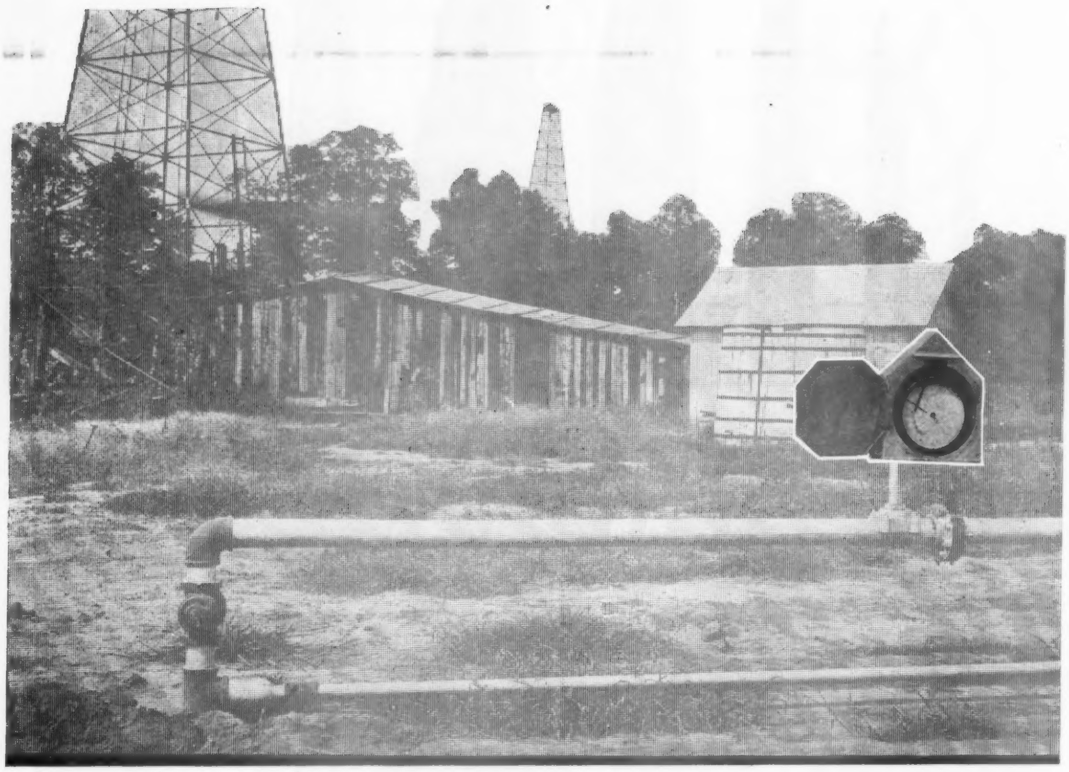
Manufacturers of and Specialists in Drilling and Fishing Tools

TULSA, OKLAHOMA

BRANCHES IN PRINCIPAL OIL FIELDS

HINDERLITER

WESTCOTT *Orifice* METERS



The more generally used, the more genuine the satisfaction.

Oil companies that equip 100% with Westcott Orifice Meters get 100% service from their dependability, durability and accuracy.

WESTCOTT & GREIS
Sales Service
Dallas TULSA Los Angeles
Ft, Worth

GENERAL OFFICES AND FACTORY: ERIE, PENNSYLVANIA, U.S.A

METRIC METAL WORKS

Is 83% of Your Drilling Time Spent Bringing Bits Up for Sharpening?

ONE large company using rotary rigs and regular steel bits found that only 17% of their drilling time was spent at the bottom of the hole with bit turning and 83% of the time was spent bringing bits out to be sharpened and returning them to the bottom of the hole. After adopting Agathon Steel for their bits, it was found that three times as much time was spent in actual drilling at the bottom of the hole. Does such economy and speedier drilling interest you? Then write for our Agathon Alloy Steel handbook and the assistance of our metallurgists in helping you select the analysis of steel best suited for your needs.

AGATHON STEELS

THE CENTRAL STEEL COMPANY, Massillon, Ohio

Swetland Bldg., Cleveland — Book Bldg., Detroit — Peoples Gas Bldg., Chicago
Aeolian Bldg., New York — University Block, Syracuse — Widener Bldg., Philadelphia
303 W. P. Story Bldg., Los Angeles, California — 1918 W.T. Waggoner Bldg., Ft. Worth, Texas

AGATHON ALLOY STEELS

12 Years' Daily Service

in Water

Dick Belt
sold by
Jarecki
The Original
Balata Belt

Without Deterioration!

A light grade of Dickbelt was allowed to run *in water* day after day to test its water-resistiveness. It ran twelve years without appreciable deterioration!

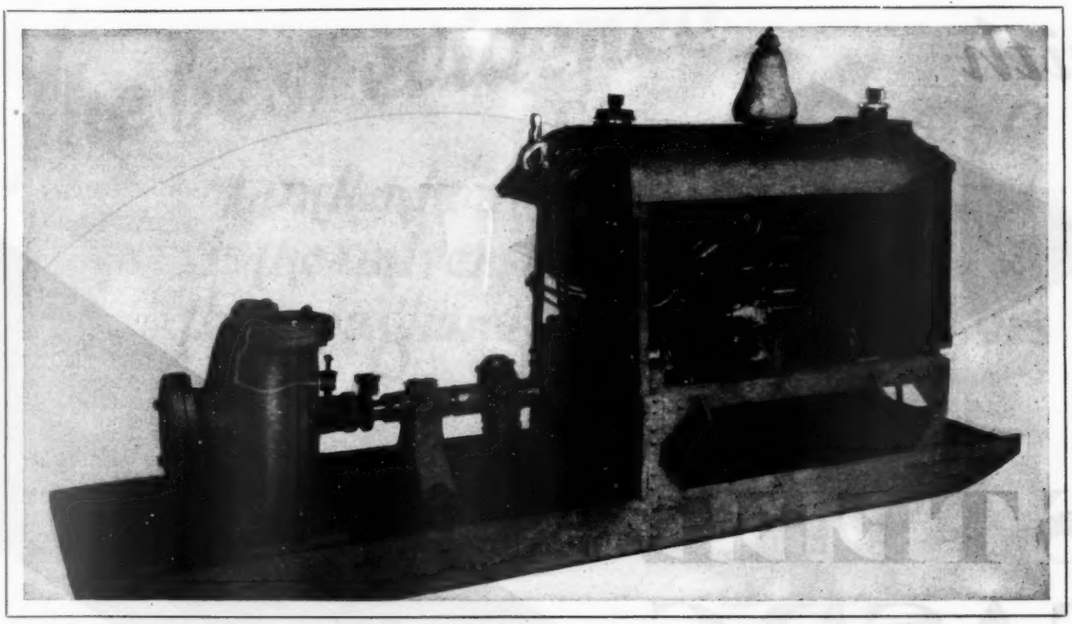
A Pennsylvania user whose name you can have on request says, "We have a number of belts, some working under severe conditions of service, but in all cases your Balata Belt gives better satisfaction than anything we have tried."

Another user writes, "On account of the great clinging quality of Dickbelt, it transmits greater H.P. under the same conditions than any belt we have ever used. It is not affected by water or climatic conditions but remains on the pulleys (neither shrinking nor stretching) just as when first put on."

Need we add anything to statements like these? The man who buys belting without investigating this super-belt is doing himself an injustice. There is a stock of Dickbelt as close to you as your nearest Jarecki store.

JARECKI MANUFACTURING CO.
Erie, Pa., U. S. A.
St. Louis Pittsburgh El Dorado
Tulsa Eastland

Jarecki



Buda portable power plant operating a centrifugal pump

It works anywhere

A compact, portable pumping outfit like the one pictured above is a necessity to almost every road builder and general contractor. Fitted with a centrifugal pump and powered with a Buda engine, it is easily started and runs smoothly all day long under full load. Requiring no special foundation, it can be quickly moved from place to place.

Standard Buda power plants also are being used for air compressors, loaders, ditchers and similar contractors' equipment where the requirement is for low-cost reliable power. Sizes range from 20 to 87 horse power. Write for bulletins describing these power plants.

THE BUDA COMPANY, HARVEY CHICAGO SUBURB ILLINOIS
ESTABLISHED 1881

Buy only genuine Buda Parts for your Buda engine

BUDA
The
ENGINE

Specify and Case with

ETNA

STEEL CASING

DISTRIBUTORS:

Bovaird Supply Company
Tulsa, Okla.
Southwest Supply Company
Bartlesville, Okla.
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Dallas, Texas
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Butler, Pa.
McEwen Bros.
Wellsville, N. Y.
Thos. H. Pike Company
Los Angeles, Cal.

ETNA WELDED TUBULAR PRODUCTS SIZES ⅛" TO 24" O.D.

SPANG, CHALFANT & CO., INC.

GENERAL OFFICES, UNION BANK BUILDING

PITTSBURGH, PA.

Branch Offices:

PITTSBURGH, PA. CHICAGO, ILL. NEW YORK, N. Y. ST. LOUIS, MO.

Mills:

ETNA, PA. SHARPSBURG, PA.

The best evidence

of the superiority of Lunkenheimer Regrinding Valves is the universal satisfaction which they are giving to thousands of users

Lunkenheimer Distributors, located in all commercial centers, carry complete stocks and render prompt service. They are prepared to present a plan of valve standardization economically adaptable to any installation. Let them advise you with the knowledge born of wide experience in supplying similar service to many satisfied users.

Lunkenheimer Bronze Regrinding Valve
Inside Screw, Union Bonnet
⅛ to 4 in.
Outside Screw and Yoke
1½ to 6 in.
Working steam pressures up to 300 pounds

THE LUNKENHEIMER CO.

"QUALITY"

CINCINNATI, OHIO, U. S. A.

NEW YORK CHICAGO BOSTON LONDON

EXPORT DEPT. 129-135 LAFAYETTE ST., NEW YORK

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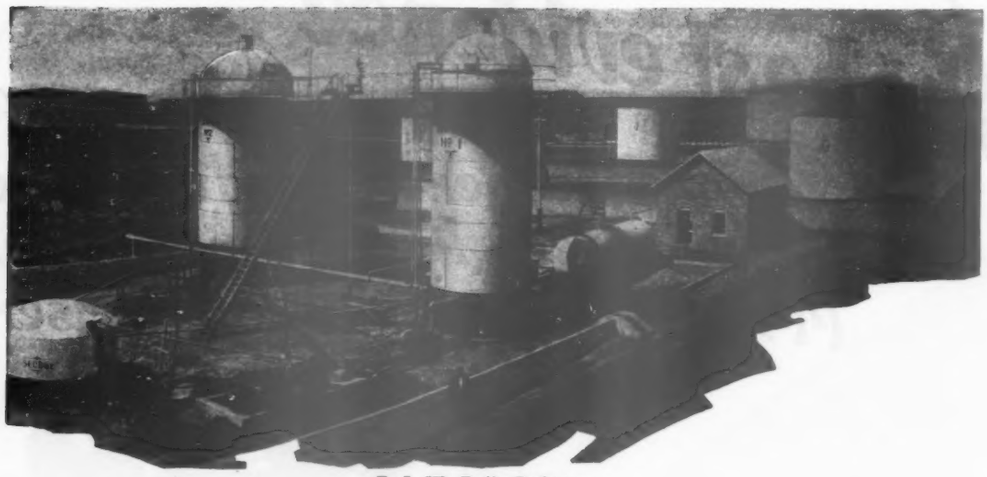


P. I. W. Built Refinery

Record Service for Any Emergency

PLATE DEPARTMENT PRODUCTS
Oil Refinery Equipment
TANKS up to 80,000 bbls. capacity
Agitators
Stills
Condenser Boxes
Smoke Stacks
Standpipes
Water Tanks
Penstocks
Riveted Steel Pipe
Storage Bins
Metal Ladles
Annealing Boxes
Blast Furnace Equipment
General Light and Heavy Steel Plate Construction

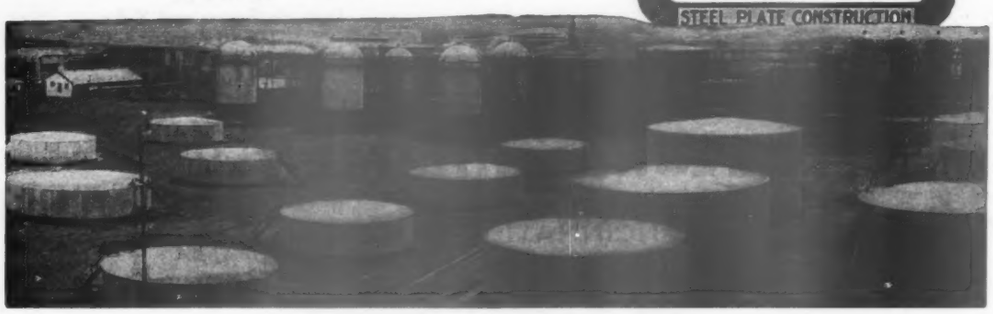
VETERAN oil men of the days of Spindle Top and Beaumont, and Sour Lake, and Humble, can testify that with P. I. W., "record service" means *just that.*

And again at Powell, when new tank records were set —with no demand for bonus—with no depreciation of quality—

Just service—*record* service—facilities so great—so well organized—that 2,000,000 barrels of storage were supplied in three weeks time.

THE PETROLEUM IRON WORKS COMPANY
Sharon, Pa.
Plants: Sharon, Pennsylvania, and Kansas City, Kansas.
New York St. Louis Tulsa Houston Kansas City San Francisco.
"P. I. W. Service is World-wide"

P.I.W.
STEEL PLATE CONSTRUCTION



A New Method To Generate Foam For Oil Fires

Nothing like it ever seen before

No Solutions Required—Continuous Operation

A well-known authority writes to us:

Aug. 24th 1925

"- - - - - the greatest development in the past decade for effectively handling oil fires."

Look for our Demonstration

BOOTH 6

West Virginia Building

INTERNATIONAL PETROLEUM EXPOSITION
TULSA, OKLAHOMA

AMDYCO CORPORATION

Main Office
100 East 42nd Street - New York, N. Y.

SEMI-DIESEL

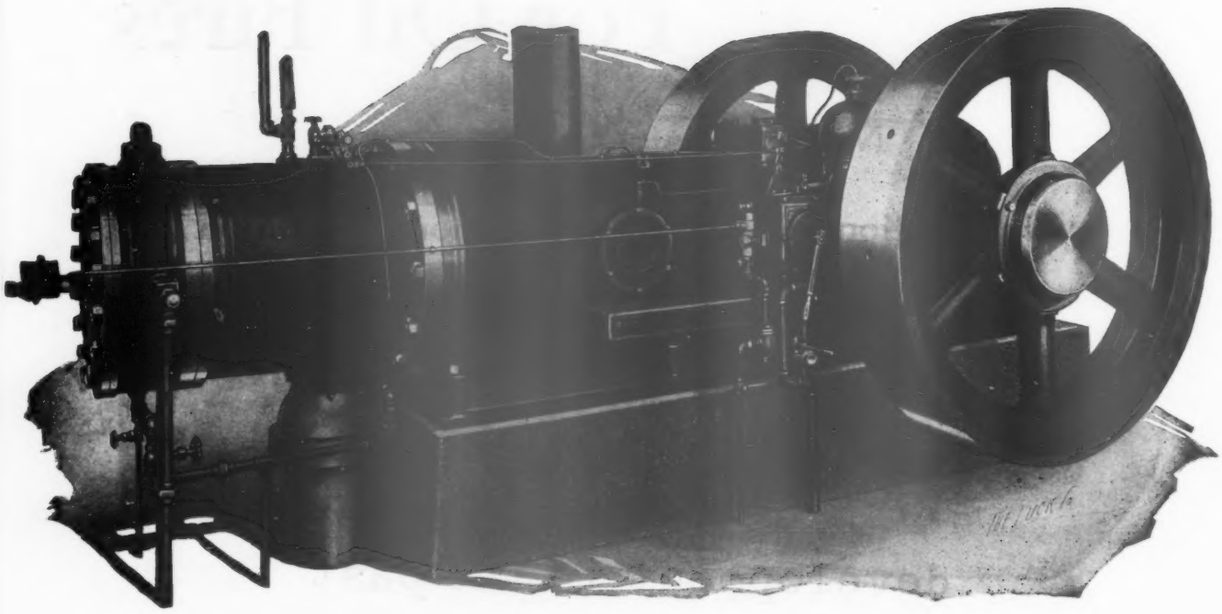
PRIMM Oil Engines

SINCE 1902

For

Oil Well Drilling
Oil Well Pumping
Oil Pipe Line

Service



THE NEW TYPE "SBU" PRIMM OIL ENGINE

PRIMM Oil Engines specially equipped for Oil Well Drilling have many advantages over forms of power that have been used in the past.

They weigh no more than a boiler for a steam engine of the same size—neither are they as bulky to move around.

The fuel cost of operation of a "PRIMM" engine is a matter of but a few cents per hour.

The speed of the "PRIMM" Drilling Engine is controlled from the derrick and its quick pick-up when the tools drop enables it to "get out of the way" readily.

When the tools are being pulled, or the well bailed out, the new "PRIMM" will maintain constant speed regardless of the amount of cable on the bull wheel, or reel—saving much time in pulling out or bailing.

The new "PRIMM" engine is built to last and has a semi-steel cylinder, steel crosshead, high point carbon steel piston rod and crankshaft.

The "PRIMM" engine has long been a favorite among Pipe Line men—its simplicity and heavy duty type of construction fits it admirably for continuous service under severe operating conditions.

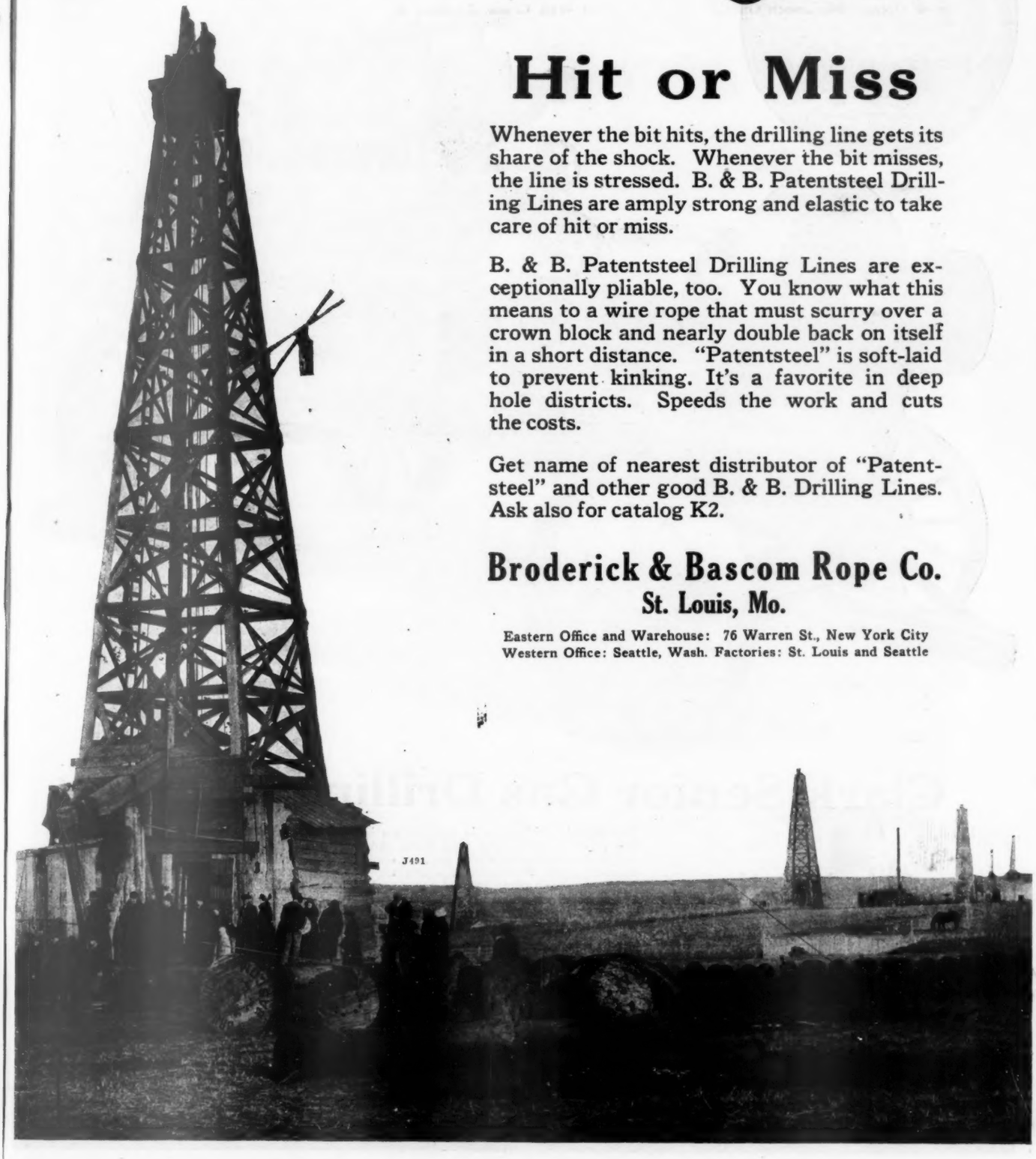
Further information will be gladly furnished.

THE POWER MANUFACTURING COMPANY

722 Cheney Avenue

Marion, Ohio

B&B Patentsteel Drilling Lines



Hit or Miss

Whenever the bit hits, the drilling line gets its share of the shock. Whenever the bit misses, the line is stressed. B. & B. Patentsteel Drilling Lines are amply strong and elastic to take care of hit or miss.

B. & B. Patentsteel Drilling Lines are exceptionally pliable, too. You know what this means to a wire rope that must scurry over a crown block and nearly double back on itself in a short distance. "Patentsteel" is soft-laid to prevent kinking. It's a favorite in deep hole districts. Speeds the work and cuts the costs.

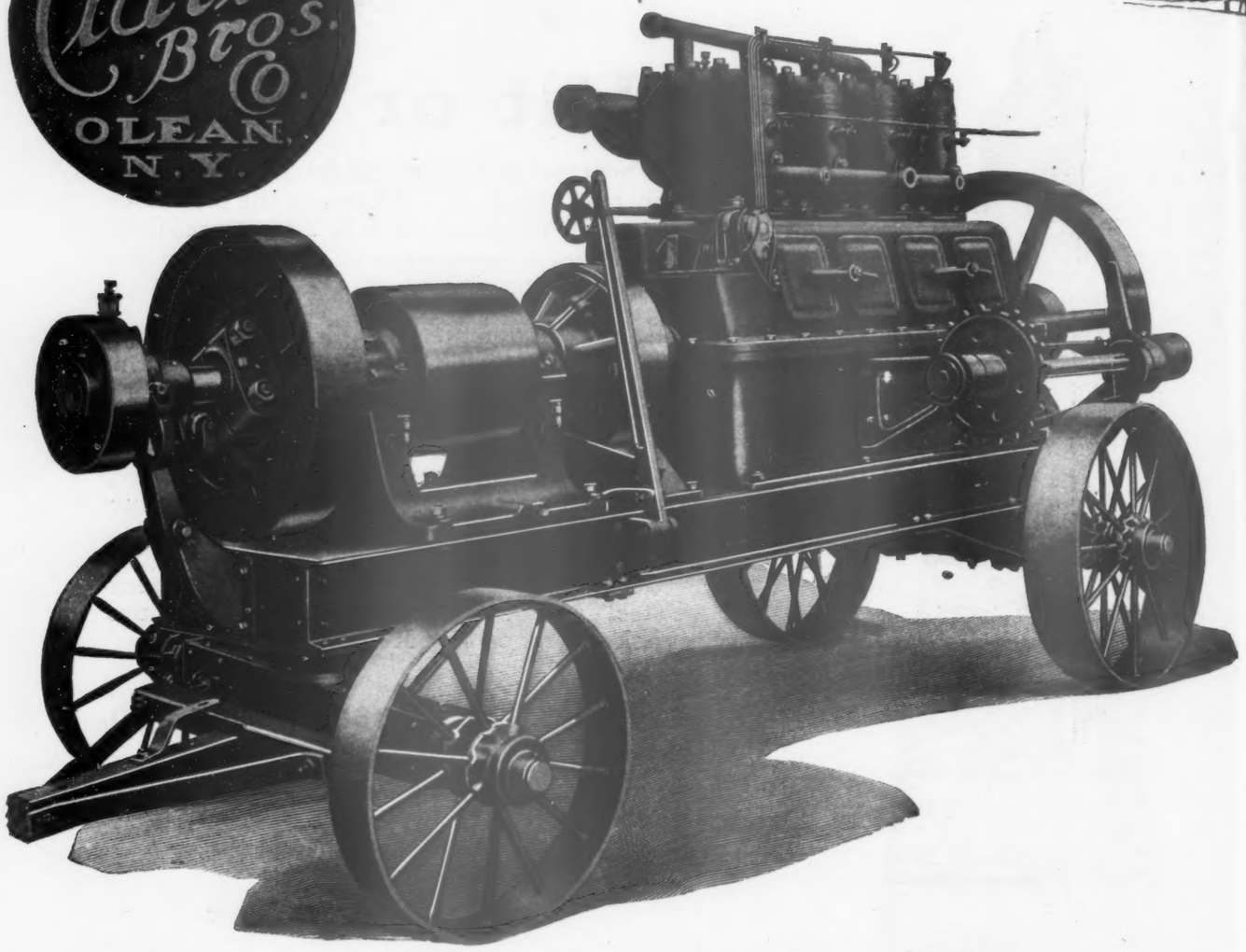
Get name of nearest distributor of "Patentsteel" and other good B. & B. Drilling Lines. Ask also for catalog K2.

Broderick & Bascom Rope Co.
St. Louis, Mo.

Eastern Office and Warehouse: 76 Warren St., New York City
Western Office: Seattle, Wash. Factories: St. Louis and Seattle

MORE *POWER* TO YOU! EAS

Clark Bros. Co. OLEAN, N. Y.



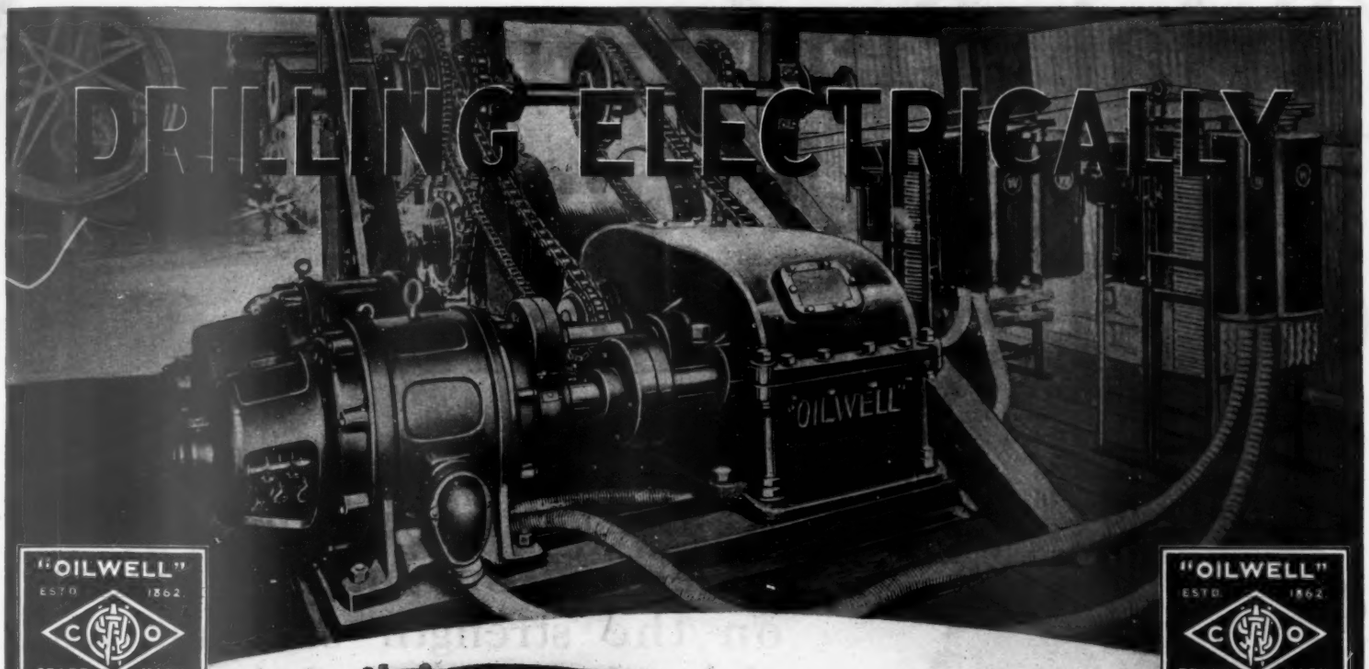
Clark Senior Gas Drilling Engine

Specifications:

One Splitdorf Magneto is used in the ignition system.
Our mixing valve is the very latest and the result of several years' experiment.
A 6 H. P. Fairbanks-Morse gas or gasoline engine is used as a starting engine and is furnished with the regular equipment.
A Myers water pump is used for circulating the water.
Pulley to run a blower is provided as a part of the regular equipment and is bolted to the fly wheel.
Our clutch is the result of years of experimenting. Adjustment of clutch for wear can be made at one point, hence insuring equal stresses on driving members.
All crankshaft bearings are die cast and easily replaced.

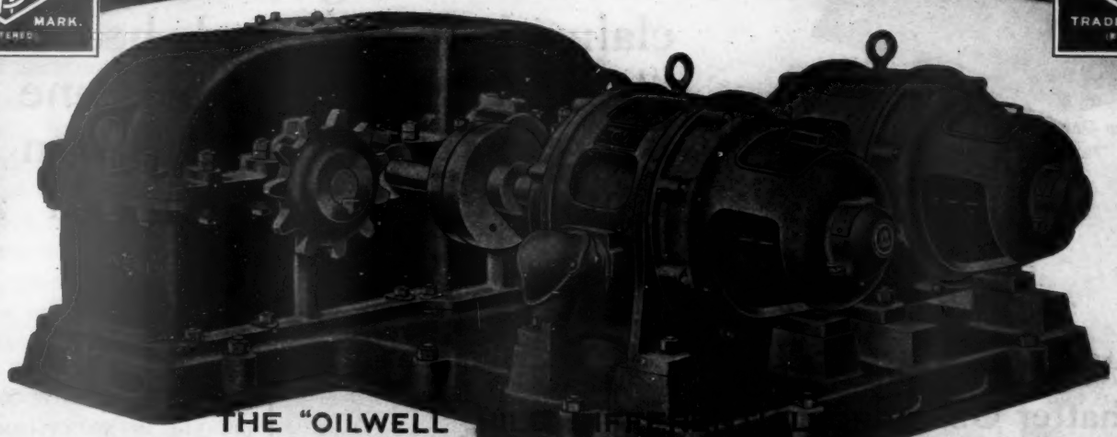
CLARK GA

DRILLING ELECTRICALLY



"OILWELL" ESTD 1862 TRADE MARK. (REGISTERED)

"OILWELL" ESTD 1862 TRADE MARK. (REGISTERED)



THE "OILWELL"

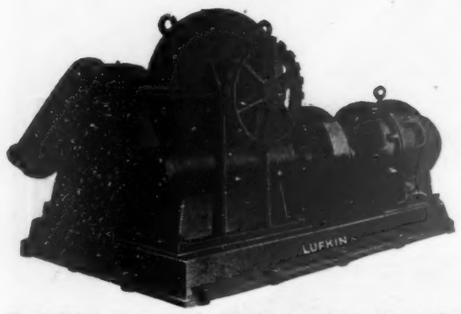
The "OILWELL" Hild Differential Drive is an electrical [illegible] which is used in connection with the standard rotary draw works or hoist in exactly the same way as a steam drilling engine is used—but in addition, it ***automatically*** feeds the [illegible] regulates or varies the bit pressure accordingly to variation in formations encountered. For complete design, construction, and operation data, write for Bulletin No. 60 or get a copy at any of our 100 Branches.

OIL WELL SUPPLY CO.

NEW YORK—LOS ANGELES—PITTSBURGH, U.S.A.—SAN FRANCISCO—TAMPICO—LONDON

WORLD'S OLDEST AND LARGEST MANUFACTURERS OF OIL FIELD EQUIPMENT

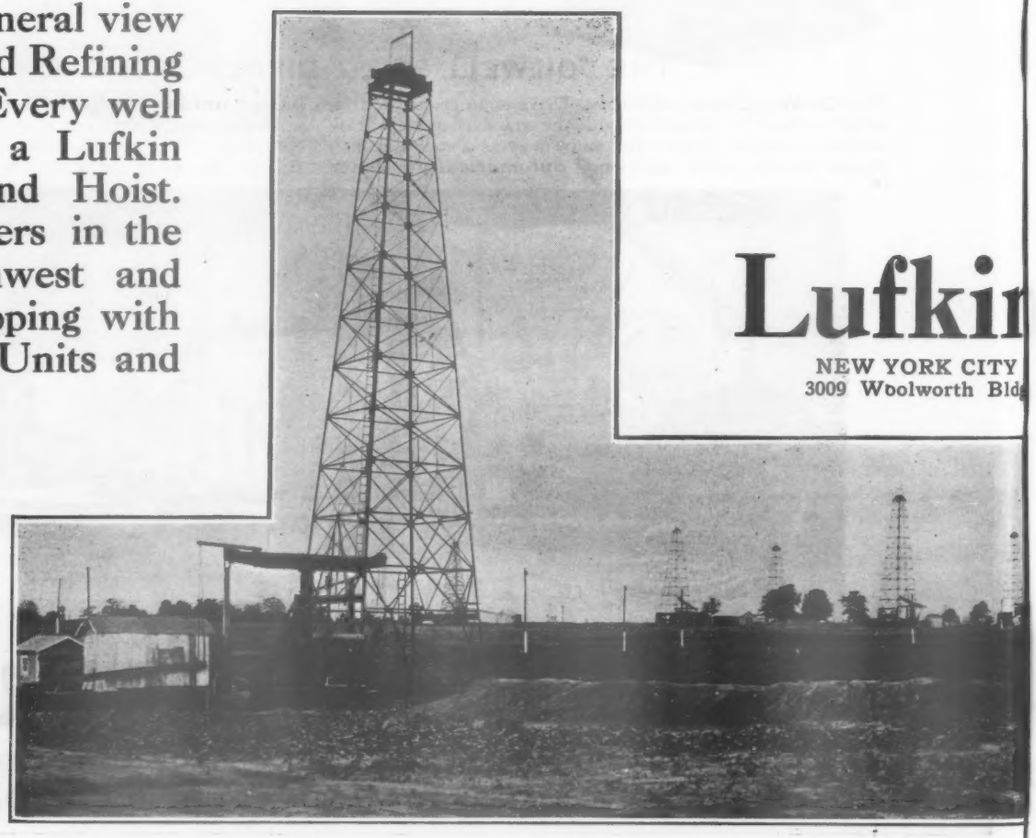
Trial Performance of Unit and Hoist Sold the Co. Equipment for Er



Back View Pump Unit—Reduction Gear—Sprocket to Drive Hoist

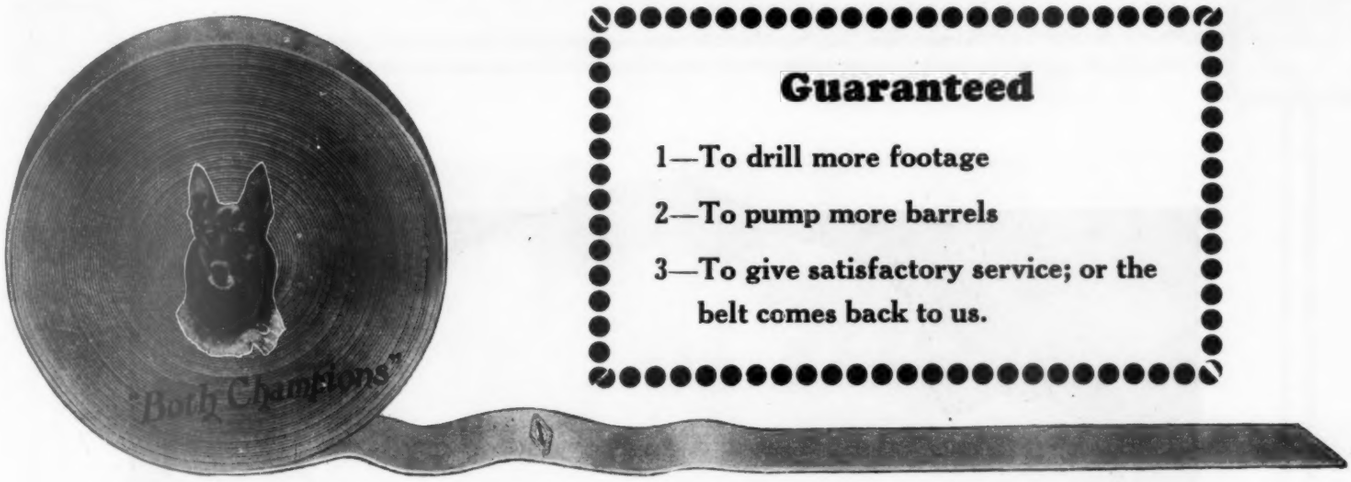
At the last Exposition in Tulsa, Oklahoma, one unit was bought on the strength of what was claimed for it and because it "looked right". That one delivered results to such an extent that the Shaffer Oil and

Here you have a general view of the Shaffer Oil and Refining Company's lease. Every well is equipped with a Lufkin Pumping Unit and Hoist. Many other producers in the fields of the Southwest and Gulf Coast are equipping with Lufkin Pumping Units and Hoist.



Lufkin

NEW YORK CITY
3009 Woolworth Bld



Guaranteed

1—To drill more footage

2—To pump more barrels

3—To give satisfactory service; or the belt comes back to us.

A Belt That Won't Bootleg, Stretch or Slip—

Made of special, hard-twisted duck and pure gum, with long-lived friction, Murruco Belts are finished with friction surface or rubber covered and stitched surface. They resist the most severe intermittent loads—are not harmed by oil or heat—and are not subject to climatic changes.

You will have absolutely no bootlegging or ply separation when you use a Murruco Belt. No breaking at the clamps. Yet, despite unusual strength and durability, Murruco Belts are much more flexible than other belts — they cling to the pulleys better—and they give more power. They are made especially for the oil industry by one of the nation's largest rubber factories.

Before the duck is made up into a Murruco Belt, its stretch is done away with. That is why Murruco Belts do not stretch. We have never known of a Murruco Belt having to be shortened more than once in its life. This eliminates shutdowns on drilling or pumping jobs for the purpose of shortening a stretched belt. With ordinary belting, such a shutdown costs more than you would pay for a Murruco.

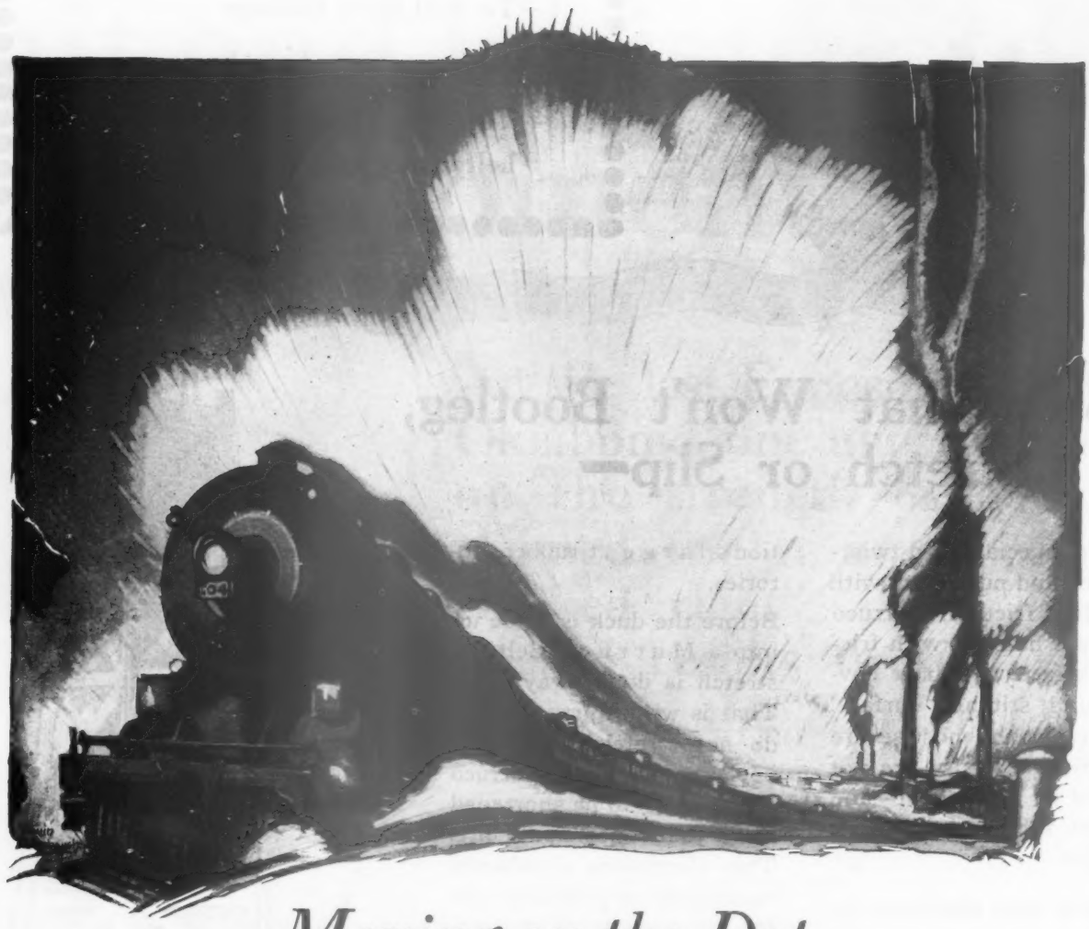
Murruco Belts are carried in 10, 11 and 12-inch widths—in 6, 7 and 8-ply—to meet every need of the oil industry. Sold under a guarantee of absolute satisfaction—or the belt comes back to us.

MURRAY RUBBER COMPANY
Factories, Trenton, New Jersey

Kansas City Branch, 712 Delaware St., Kansas City, Mo.
Ketchum Bros., 1236 E. 8th St., Los Angeles, Calif.
Empire Supply Co., 440 Bryant St., San Francisco, Calif.
Chicago Branch, 601 W. Randolph St., Chicago, Ill.

"The Name to Know in Belting"

Murruco



Moving on the Dot

There is no such word as "delay" in the Pure Oil Company's Service of Supply. Every order, whether for a barrel or a train load, moves on time. Every product is strictly to specifications.

This is the kind of dependable, profit-making service that is yours to command.

Phone, Wire or Write.

THE PURE OIL COMPANY

General Offices: COLUMBUS, OHIO

Refineries at:
MARCUS HOOK, PA.
WARREN, PA.
HEATH, OHIO
CABIN CREEK JCT., W. VA.
SMITH'S BLUFF, TEXAS
MINNEAPOLIS, MINN.
CUSHING, OKLA.
ARDMORE, OKLA.
MUSKOGEE, OKLA.

Branch-Offices at:
CHICAGO
NEW YORK
PHILADELPHIA, PA.
DALLAS
WARREN, PA.
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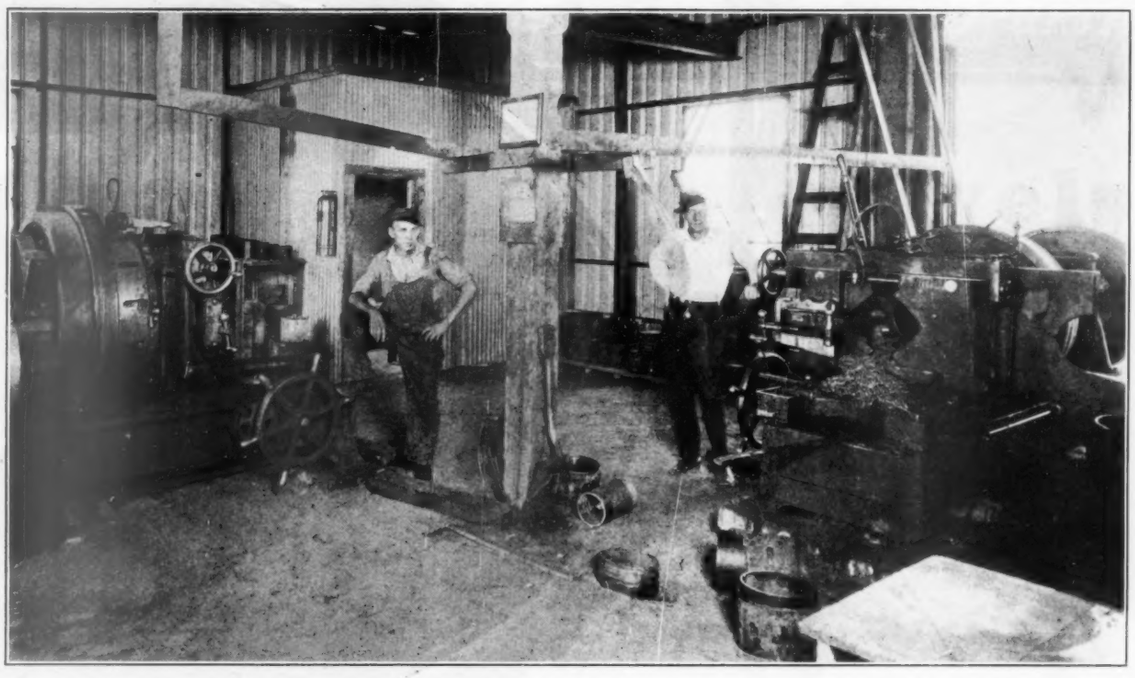
100 PER CENT SUPER-PENNSYLVANIA
COMMANDS A PREMIUM PRICE
CABIN CREEK
OVER ALL OTHER CRUDES



Curved Eccentric Relief Gives Maximum Production

It is a well recognized fact that for the best results from metal cutting tools, the cutting edge must stand well ahead of the center line of the machine. Peerless dies are constructed with this principle in mind. They have the curved eccentric relief which reduces friction to a minimum, requiring only a fraction of the power used by other types of dies.

The Peerless Adjusting Mechanism gives a screw adjustment for obtaining correct depth of cut and the graduated scale enables the operator to instantly set dies to the correct depth for either standard or special fittings. It is easy to change from one thread, taper or size to another. Any intelligent youth can make all changes and operate the machines at a very low labor cost. There are no complicated settings nor heavy parts to handle.

All Bignall & Keeler Machines have ample power for either making up or breaking down fittings, and measure up to every requirement. We show an interior view of the Cromwell shop of the Feenberg Pipe & Supply Company, equipped with B & K machines. The No. 12 Duplex capacity 4" to 12½" pipe or casing is shown at the right, giving a clear view of the heavy hardened steel facings on the steady slides, the cutting-off tool and the combination reaming and beveling tool. The dies can be seen in close formation back of the steady slides, ready for work. The No. 16 Duplex machine is shown on the left. These machines cannot be excelled for either speed, strength or durability. Both machines have skip tooth dies 3 7-16" wide for long tapered threads.

We carry Landis die-heads in stock. They are desirable when threading large quantities of pipe or casing, all having the same

Consult us if in the Market

Bignall & Keeler Machine Works, of the N. O. Nelson Mfg. Company
Edwardsville, Illinois

No. 2A National Portable Drilling Machine

NATI

BUILT IN T

No. 2 Designed for 2500
WOOD mast, wall

No. 2A Designed for 250
with STEEL ma
wheels.

No. 3 Designed for 350
struction.

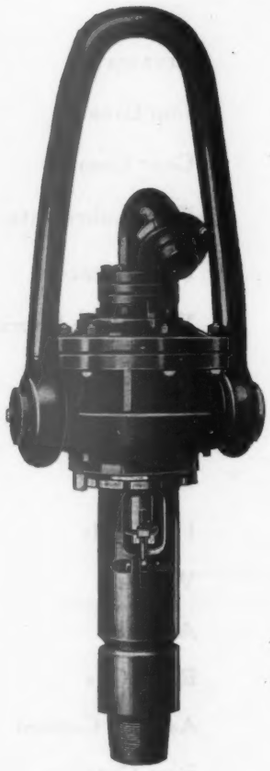
THE NATIONAL SU

Watch this space for Lucey Products with RollerBearings

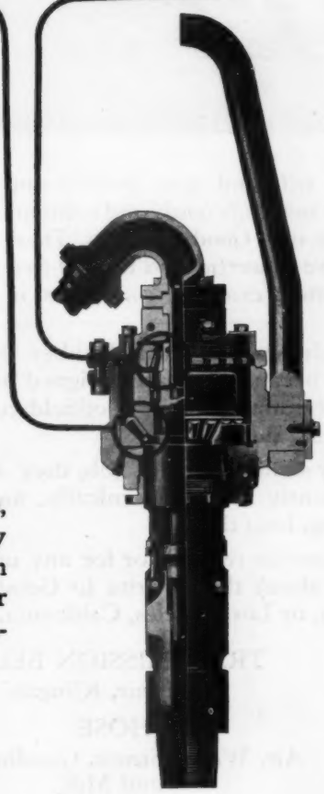
Lucey Rotary Swivels

Equipped With

Timken Roller Bearings



To keep pace with modern rotary drilling methods, the Lucey Manufacturing Corporation introduced the first swivel equipped with two tapered roller bearings,—one for the load and one for the upward thrust and alignment. The advantages of this construction were immediately recognized throughout the rotary field and every test has proven its superiority.



Lucey swivels are now made in three sizes, 3-inch, 4-inch and 6-inch, to meet every drilling requirement. Every comparison in length, weight and simplicity with other swivels of equal capacity add to the prestige of the Lucey roller bearing swivel.

A descriptive bulletin is yours for the asking

"Branches in All Active Oil Fields"

LUCEY MANUFACTURING CORPORATION

CHATTANOOGA — TENN.

EXPORT DEPARTMENT - WOOLWORTH BLDG., NEW YORK

GOODYEAR MEANS GOOD WEAR

You will find your drilling and pumping are done more efficiently and economically when you equip with Goodyear Belts. These belts are built to give powerful and trouble-free service, under the most exacting conditions of oilfield duty

Goodyear Mechanical Rubber Goods serve so well because they are designed and built with a full understanding of oilfield conditions and refinery duty.

They stand up to the job, they do their work efficiently and economically, and they wear a long, long time.

For service records, or for any other information about them, write to Goodyear, Akron, Ohio, or Los Angeles, California.

TRANSMISSION BELTS
Goodyear, Klingtite

HOSE
Air, Water, Steam, Gasoline, Fire and Mill

OIL SUCTION or DISCHARGE HOSE

ROTARY HOSE

PACKING
Asbestos and Rubber Sheet for both field and refinery service

PUMP VALVES

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SWAB RUBBERS

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Petroleum Products

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Machine Oils
Cylinder Oils
Cylinder Stocks
Car Oils

Greases
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Gear Greases
Gear Lubricants
Axle Greases
Wire Rope Lubricants
Pale Oils
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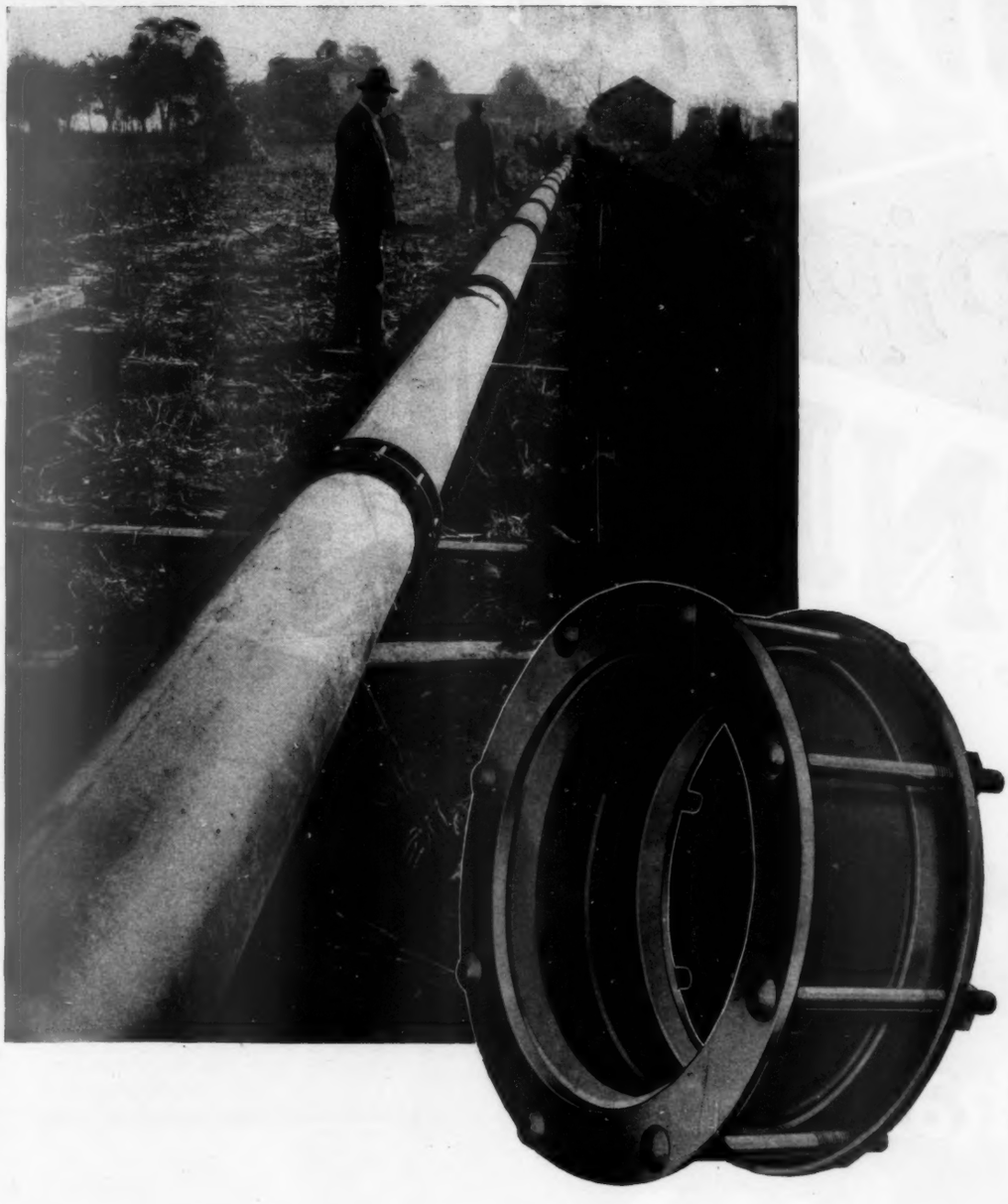
THE TEXAS COMPANY

NEW YORK 17 Battery Place
CHICAGO McCormick Bldg.
HOUSTON The Texas Co. Bldg.

Offices in Principal Cities

Export Dept.: 17 Battery Place, New York City



A tight jointed and flexible line is assured where Dayton No. 1 All Steel Coupling are used.

THE DAYTON PIPE COUPLING CO.
DAYTON OHIO, U. S. A.

Protect

TNEMECOL

PRONOUNCED T-NE'-ME-COL

PAINT

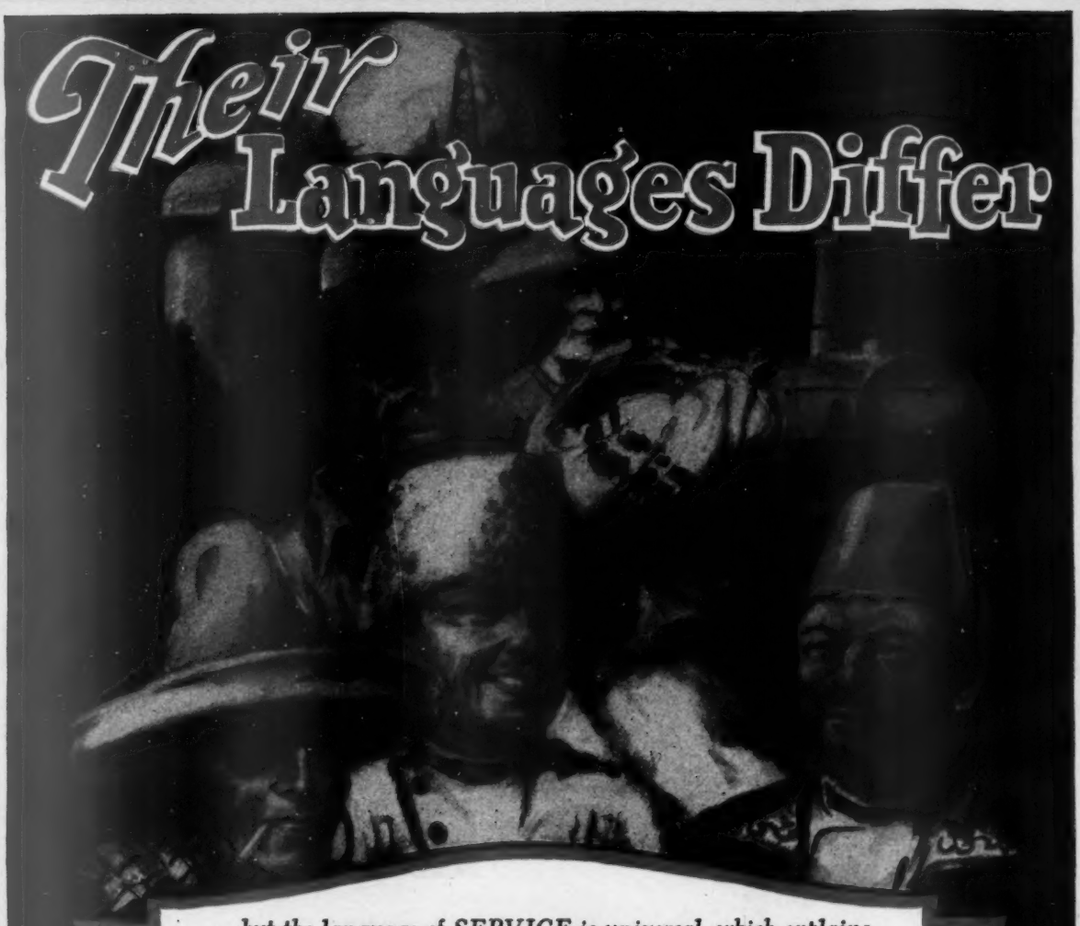
Water Proof

alkali Proof

acid Proof

CONTINENTAL

Their Languages Differ



—but the language of SERVICE is universal, which explains why the reputation of GASO Pumps is world-wide.

In recent months we have received an order for four GASO Pumping Units, duplicating one we shipped about a year ago to *Baku, Russia.*

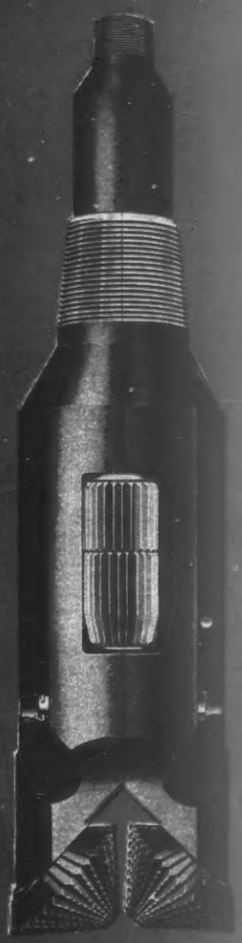
In the same period GASO Pumps have left Tulsa bound for *India, Egypt, British West Indies, South America, Roumania* and *Spain.*

To those who know foreign methods of investigating equipment, export orders have a particular importance. The engineers of these far-away companies realize that in buying American goods they are thousands of miles away from factory service. Consequently, perfect operation, low maintenance and long life simply must be built into the goods they buy.

All of which explains why so many specify GASOS.

GASO PUMP & BURNER MFG. CO., *Tulsa, Oklahoma*

When Drilling Through Tight Formation Use a



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"Ample Clearance"

Sold by Your Supply Store

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